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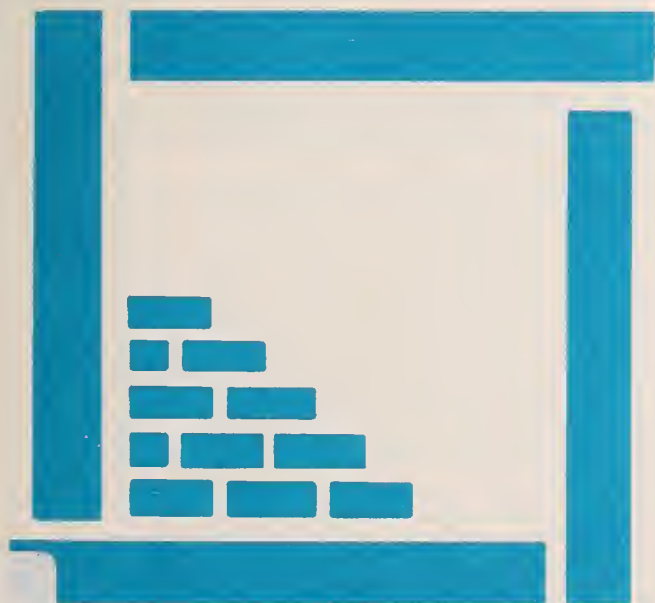
Census of Construction Industries

CC87-A-3

GEOGRAPHIC AREA SERIES

East North Central States

Illinois, Indiana, Michigan, Ohio, Wisconsin



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ACKNOWLEDGMENTS

Many persons participated in the various activities of the 1987 Census of Construction Industries.

The overall planning and review of the census operations were performed by the staff of the Office of the Assistant Director for Economic and Agriculture Censuses.

This report was prepared in the Construction Statistics Division. **Barry A. Rappaport**, Assistant Division Chief for Industry Surveys, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **A. William Visnansky**, Chief, Census Operations Branch, with primary staff assistance by **Juliana Van Berkum**, **Barbara J. Hadden**, **Edward R. Glover**, **Susan L. Hostetter**, **Shirley M. Baker**, and **Carolyn J. Stone**. Under the direction of **Jesse Pollock**, **Edward K. Ricketts** and **Dennis K. Duke** developed the sampling plans and variance and estimation specifications.

Systems and procedures for mailout, receipt, correspondence, data input, industry classification, other clerical processing, administrative record processing, and quality control, along with the associated electronic computer programs, were developed in the Economic Surveys Division, **W. Joel Richardson**, Chief.

Mailout preparation and receipt operations, clerical and analytical review activities, data keying, and geocoding review

were performed by the staff of the Data Preparation Division, **Joseph S. Harris**, Chief.

Geographic coding procedures and associated computer programs were developed by the staff of the Geography Division, **Robert W. Marx**, Chief.

The computer processing systems were developed and coordinated in the Economic Programming Division, **Barry M. Cohen**, Chief, and **H. Ray Dennis**, Assistant Chief. **Sarah W. Baumgardner**, Chief, Construction Census Branch, was responsible for the design and implementation of the computer systems. The computer programs were prepared under the supervision of **Barbara L. Lambert**, assisted by **Herbert Isham** of the Construction Statistics Division. **Linda M. Mersh** and **James Dallmann** assisted in establishing and maintaining the production control system.

Computer processing was performed in the Computer Services Division, **Marvin D. Raines**, Chief.

The staff of the Administrative and Publications Services Division, **Walter C. Odom**, Chief, performed planning, design, composition, editorial review, and printing planning and procurement for publications and report forms. **Bernadette J. Beasley** provided publication coordination and editing.

Special acknowledgment is also due the many businesses whose cooperation has contributed to the publication of these data.

If you have any questions concerning the statistics in this report, call (301) 763-7546.

1987

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Issued July 1990



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Library of Congress Cataloging-in-Publication Data

Census of construction industries (1987). Geographic area series.

1987 census of construction industries. Geographic area series.

"CC87-A-1—CC87-A-10."

"Issued April—June 1990."

Contents: [1] New England states — [2] Middle atlantic states — [3] East north central states — [etc.]

1. Construction industry—United States—Statistics.

I. United States. Bureau of the Census.

HD9715.U52C46 1990 338.4'7624'093021 88-22146

For sale by Superintendent of Documents, U.S. Government
Printing Office, Washington, DC 20402.

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PURPOSE AND USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source of facts about the structure and functioning of the Nation's economy. They provide essential information for government, business, industry, and the general public.

Economic censuses furnish an important part of the framework for such composite measures as the gross national product, input-output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policy-making agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries, and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic censuses every 5 years, covering years ending in 2 and 7. The 1987 Economic Censuses consist of the—

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1987 Census of Agriculture and 1987 Census of Governments are conducted separately.) The next economic censuses are scheduled to be taken in 1993 covering the year 1992.

AVAILABILITY OF THE DATA

The results of each of the economic censuses are available in printed reports, for sale by the U.S. Government Printing Office, and on microfiche, computer tape, compact discs with read-only memory, and flexible diskettes, for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Census Bureau, Washington, DC 20233. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State and Business and Industry Data Centers in many States also supply economic census statistics.

WHAT'S NEW IN 1987

Several changes have taken place for the 1987 censuses. Data will be reported on the basis of the newly revised Standard Industrial Classification (SIC) system with selected reports including "bridge tables," linking the old and new classification systems. A new set of metropolitan

areas has been adopted, and more detailed information will be available for businesses with no paid employees. For additional information on these changes, review the subsequent text.

One important change involves receipts of contractors and builders. Prior to 1987, the Census of Construction Industries collected receipts as the primary measure of construction activity. For 1987, the census collected the "value of construction work done" to better measure actual construction activity done during the year. Differences between the two concepts occur when work is done in one year and payment received either from the prior or in the succeeding year. In addition, receipts do not include work a contractor performs for its own account and use.

HISTORICAL INFORMATION

The economic censuses have been taken together as an integrated program at 5-year intervals since 1967, and before that for 1963, 1958, and 1954. Prior to that time, the individual censuses were taken separately at varying intervals.

The economic censuses trace their beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 manufactures census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade, and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 economic censuses were the first to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. These were the first censuses to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records have also been used to provide basic statistics as well for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic censuses, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The Census of Construction Industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The Census of Transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks. New for 1987 are publications reporting on business establishments engaged in several transportation industries, paralleling the data on establishments in

other sectors. This is part of a gradual expansion in coverage of industries previously subjected to government regulation. The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic censuses in 1972 along with the Survey of Women-Owned Businesses.

Economic censuses have also been taken in Puerto Rico since 1909, in the Virgin Islands and Guam since 1958, and in the Northern Mariana Islands since 1982.

Statistical reports from the 1982 and earlier censuses provide historical figures for the study of long-term time series, and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the censuses provide complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, the results of which appear in publication series such as *Current Construction Reports* (building permits, housing starts, and value of new construction put in place), *Current Business Reports* (retail and wholesale trade and service industries), the *Annual Survey of Manufactures*, *Current Industrial Reports*, and the *Quarterly Financial Report*. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the censuses. The *County Business Patterns* program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1987 Economic Censuses and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1987 Economic Censuses*. Contact Customer Services for information on availability.

CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION

The 1987 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property

into lots as defined in the 1987 Standard Industrial Classification (SIC) Manual.¹ This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction—The SIC manual defines construction in three broad types of activity that follow:

1. **Building construction by general contractors or by operative builders**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors**—Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors**—These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

In addition to the industries classified in the SIC manual as Construction, this census also includes one industry

classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. These establishments are engaged in subdividing real property into lots and in developing it for sale on their own account.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1987. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

A revised edition of the SIC Manual was issued in 1987. Minor modifications were made to three industries in the construction sector: SIC 1611, Highway and Street Construction Contractors, Except Elevated Highways; SIC 1629, Heavy Construction Contractors, N.E.C.; and SIC 1771, Concrete Work Special Trade Contractors. The extent of these modifications are explained in the specific texts for those industries. "Bridge tables" are also included showing selected data tabulated using both the previous classification system and the 1987 revision.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1987. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

¹Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

If an establishment engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1987 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1987 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1987 Census of Construction Industries were identified as part of an operation common to all 1987 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies—This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative records data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1987 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1987 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample—The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with estimated total employment of 20 employees or more, and a probability sample of single-establishment companies with estimated employment of fewer than 20 employees.

Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 533,000 single-establishment employer companies initially classified as construction companies, 147,000 were included in the sample. All of the 13,000 establishments of multiestablishment companies were included in the sample. There was a net increase in the sample of 60,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan

area or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1987 and 1982 data—Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1987 and 1982 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c}$$

- where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.
- x_i is the reported value of a characteristic for an individual establishment in the publication cell.
- p_i is the selection probability of that firm.
- n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the

sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts", referred to in the tables as "dollar value of business done", was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1987 Census of Construction Industries was obtained from employer establishments primarily through the use of twenty-four questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179 and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and appropriate advisory groups. The Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

DATA PROCESSING

The 1987 census report forms were mailed out in December 1987. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1988.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all

revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1987 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical locations of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries, results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is defined in the 1987 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, land receipts are also subtracted from dollar value of business done.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1987 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, DC, 20233.

X INTRODUCTION

CONSTRUCTION—GEOGRAPHIC AREA SERIES

To discuss a special tabulation before submitting specifications, call 301-763-7546.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1987 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the Census of Construction.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others, and costs for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from dollar value of business done. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(W)	Greater than zero but less than 1 percent.
(X)	Not applicable.
n.s.k.	Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By Industry	By employment size	By size class of the dollar value of business done	By type, class, ownership, kind of business, and location of construction ¹	By CMSA, PMSA, and MSA ²
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery and equipment.....	5					
End of year—total.....	3, 5	3	7	8		
End of year—buildings, machinery and equipment.....	5					
Depreciation charges during year—buildings, machinery and equipment.....	5					
Capital expenditures:						
Total capital expenditures.....	3, 5	3	7	8		12
New buildings—machinery and equipment.....	5					
Used buildings—machinery and equipment.....	5					
Communication services, payments for.....	4					
Employees:						
All employees—average number.....	3	3	7	8		12
Construction workers—average number.....	3, 4, 10	3, 10				
Other employees—average number.....	4					
Employer costs for fringe benefits—legally required and voluntary expenditures.....	4					
Establishments:						
Number in business at end of year.....	4					
Number in business during year:						
All.....		1		2		
With payroll.....	3, 4, 6, 10	1, 3, 10	7	2, 8		12
Without payroll.....		1		2		
Hours—construction workers:						
Total.....	3, 4, 10	3, 10	7	8		
Quarterly.....	4, 10	10				
Inventories.....	6					
Materials, components, supplies, and fuels—payments for.....	3, 4	3	7	8		12
Payroll:						
First quarter, all employees.....	4					
Annual:						
All employees.....	3, 4	3	7	8		12
Construction workers.....	3, 4	3				
Other employees.....	4					
Power, fuels, and lubricants—payments for.....	4					
Proprietors and working partners:						
All establishments.....		1		2		
Establishments with payroll.....	4	1		2		
Establishments without payroll.....		1		2		
Ratios, industry.....	11	11				
Receipts:						
Dollar value of business done:						
All establishments.....		1		2		
Establishments with payroll.....	4	1	7	2, 8		
Establishments without payroll.....		1		2		
Value of construction work, total.....	3, 4, 6	3	7	8	4, 9,	12
For work subcontracted in from others.....	4					
Other business receipts.....	4					
Land receipts ³	4					
Net value of construction work.....	3, 4	3	7	8		12
Value added.....	3, 4	3	7	8		12
Rental payments:						
Total.....	3, 4	3	7	8		
For machinery and equipment.....	4					
For buildings.....	4					
Repairs to buildings and other structures.....	4					
Repairs to machinery and equipment.....	4					
Subcontract work to others, payments for.....	3, 4	3	7	8	12	

Note: Data for 1982 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work. Ownership—private or government owned.

²CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan Statistical area.

³Land receipts are shown separately for SIC's 1531 and 6552 only.



* The Midwest Region was designated as the North Central Region until June 1984.

U.S. DEPARTMENT OF COMMERCE
Bureau of the Census



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Illinois

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SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Illinois. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 71,913 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$26.2 billion in total value of business done.

Most of the 71,913 construction establishments were small. Of the total, 51,341 were nonemployers, and over half of the employer establishments had less than 5 employees. The 9,308 construction establishments with 5 employees or more, while representing only 13 percent of all establishments, accounted for more than 80 percent of the total value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$23.3 billion on total dollar value of business done. Of this amount, \$22.6 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$5.7 billion, leaving net value of construction work of \$16.8 billion. In addition, these establishments paid out \$7.0 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$10.9 billion. (See Introduction and appendices for explanation of terms.)

There were 20,572 establishments with total employment averaging 209,154 during the year. Total payroll for 1987 was \$5.5 billion. Total hours worked by construction workers during the year were 280 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 51,341 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$2.9 billion. Most of these establishments, about 78 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**
(Percent)

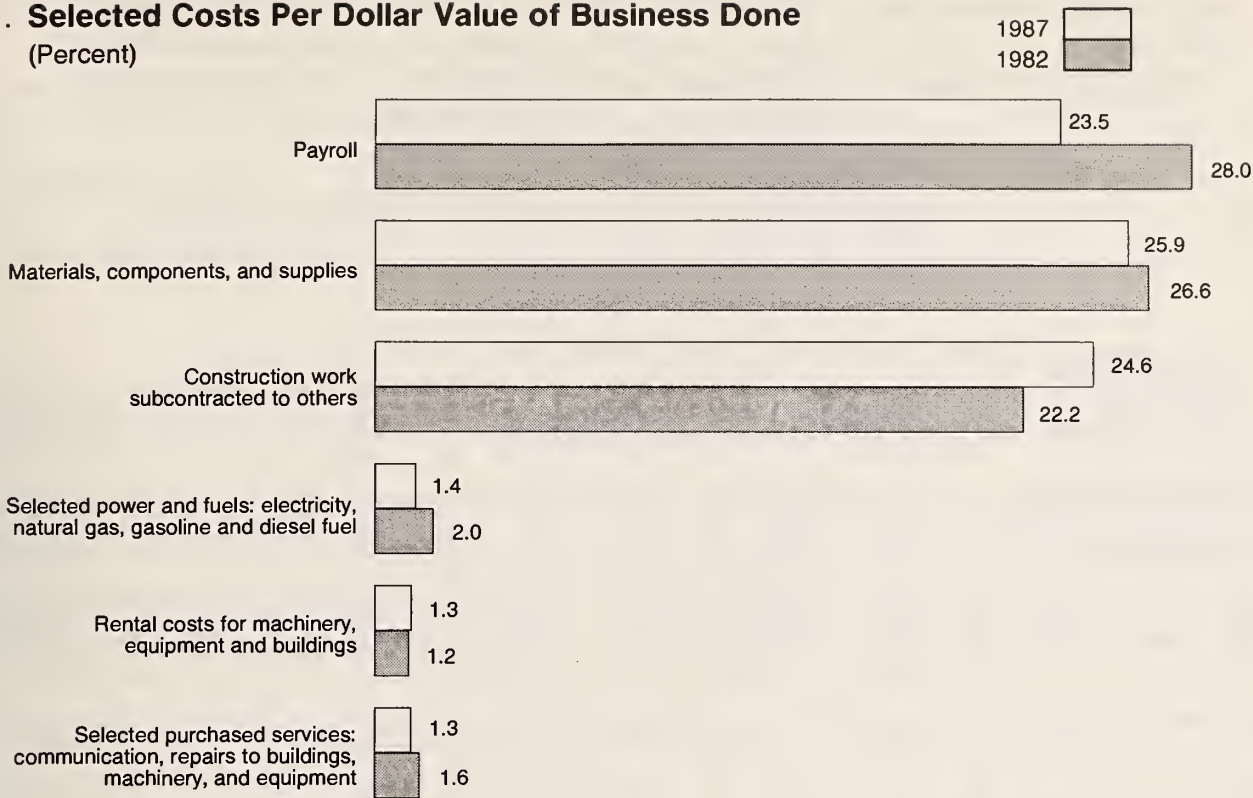


Figure 2. **Value of Construction Work by Type of Construction**
(Percent)

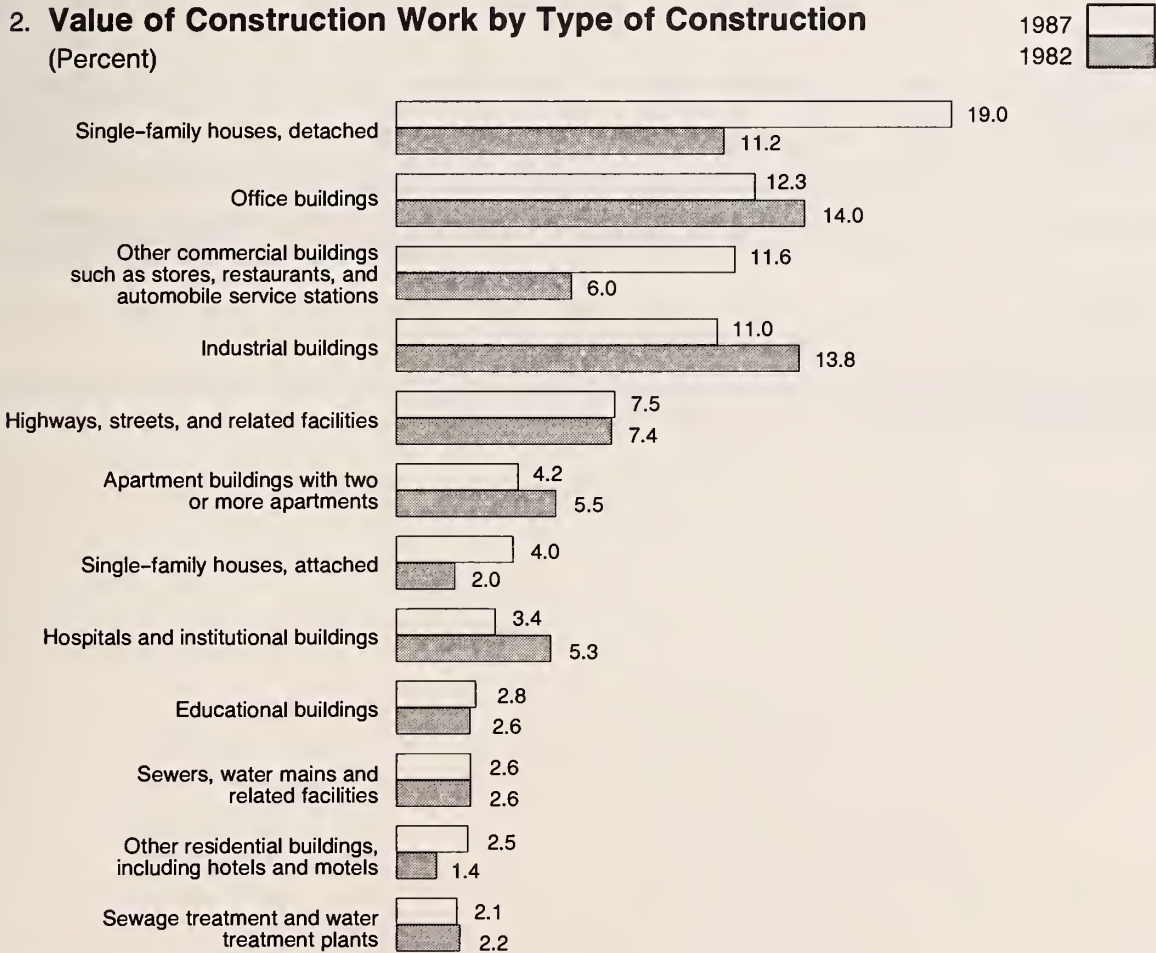


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1987													
	Construction industries and land subdividers and developers -----	71 913	54 989	209 154	26 212 664	51 341	50 420	2 918 968	20 572	4 569	209 154	23 293 696	1	1
15, 16, 17	Construction industries -----	70 552	53 791	208 068	25 542 787	50 267	49 238	2 417 771	20 285	4 553	208 068	23 125 016	1	1
15	Building construction—General contractors and operative builders ----	15 039	9 924	47 253	9 739 629	9 655	8 829	941 197	5 384	1 095	47 253	8 798 432	2	1
16	Heavy construction other than building construction— contractors -----	1 786	773	25 413	3 540 334	549	561	163 378	1 237	212	25 413	3 376 956	1	1
17	Special trade contractors -----	53 727	43 094	135 402	12 262 824	40 063	39 848	1 313 196	13 664	3 246	135 402	10 949 628	1	1
1711	Plumbing, heating, and air-conditioning --	6 807	4 408	28 475	2 804 288	3 691	3 626	173 714	3 116	782	28 475	2 630 574	1	1
1731	Electrical work -----	4 840	3 159	23 636	2 093 251	2 959	2 895	103 719	1 881	264	23 636	1 989 532	1	1
6552	Land subdividers and developers, n.e.c.² -----	1 348	1 185	1 072	669 866	1 074	1 182	501 197	274	3	1 072	168 669	9	12
	1982													
	Construction industries and land subdividers and developers -----	54 145	45 085	170 822	15 376 877	35 827	35 847	1 914 116	18 318	6 238	170 822	13 462 761	1	(W)
15, 16, 17	Construction industries -----	53 336	41 305	169 865	15 108 943	35 184	35 088	1 717 690	18 152	6 217	169 872	13 391 261	1	(W)
15	Building construction—General contractors and operative builders ----	10 923	7 867	33 491	4 711 860	6 711	6 495	643 341	4 212	1 372	33 492	4 068 520	1	1
16	Heavy construction other than building construction— contractors -----	1 988	1 178	27 368	2 862 701	922	929	261 070	1 066	249	27 369	2 601 632	1	1
17	Special trade contractors -----	40 425	32 260	109 006	7 534 382	27 551	27 664	813 279	12 874	4 596	109 011	6 721 109	1	1
1711	Plumbing, heating, and air-conditioning --	5 108	3 302	23 125	1 686 009	2 314	2 317	117 066	2 794	985	23 125	1 568 943	1	1
1731	Electrical work -----	3 399	2 190	20 347	1 432 638	1 830	1 807	62 940	1 569	383	20 347	1 369 698	1	(W)
6552	Land subdividers and developers, n.e.c.² -----	802	777	950	267 926	643	759	196 426	159	18	950	71 500	5	5

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

¹For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

²For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll ¹			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done ²		
	A	B	C	D	E	F	G	H	I	J	K	J	K
1987													
The State	71 913	54 989	209 154	26 212 664	51 341	50 420	2 918 968	20 572	4 569	209 154	23 293 696	1	1
\$10,000,000 or more	362	23	52 928	9 242 834	5	8	145 045	357	15	52 928	9 097 789	(W)	(W)
\$5,000,000 to \$9,999,999	486	48	25 240	3 406 983	27	32	194 800	459	16	25 240	3 212 183	1	2
\$2,500,000 to \$4,999,999	1 017	108	27 504	3 509 504	61	75	209 257	956	33	27 504	3 300 247	1	2
\$1,000,000 to \$2,499,999	2 341	311	34 617	3 653 091	190	170	289 301	2 151	141	34 617	3 363 790	2	2
\$500,000 to \$999,999	3 043	752	23 707	2 149 378	402	328	283 023	2 641	424	23 707	1 866 355	3	3
\$250,000 to \$499,999	4 779	1 726	20 293	1 660 493	1 032	945	357 381	3 747	781	20 293	1 303 112	3	3
\$100,000 to \$249,999	9 008	5 259	17 109	1 429 098	3 565	3 420	543 093	5 443	1 839	17 109	886 005	3	3
\$50,000 to \$99,999	(S)	(S)	(S)	(S)	5 245	5 124	370 714	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999	(S)	(S)	(S)	(S)	7 313	7 136	258 894	(S)	(S)	(S)	(S)	(S)	(S)
Less than \$25,000	(S)	(S)	(S)	(S)	33 501	33 182	267 459	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999	(NA)	(NA)	(NA)	(NA)	11 080	10 973	180 997	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999	(NA)	(NA)	(NA)	(NA)	7 355	7 281	53 253	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999	(NA)	(NA)	(NA)	(NA)	5 914	5 851	21 519	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000	(NA)	(NA)	(NA)	(NA)	9 152	9 077	11 690	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1982													
The State	54 145	42 085	170 822	15 376 877	35 827	35 847	1 914 116	18 318	6 238	170 822	13 462 761	1	(W)
\$10,000,000 or more	210	41	42 449	5 546 892	17	20	573 023	193	21	42 449	4 973 869	(W)	(W)
\$5,000,000 to \$9,999,999	264	39	18 847	1 779 085	8	14	56 591	256	25	18 847	1 722 494	(W)	(W)
\$2,500,000 to \$4,999,999	512	49	20 499	1 787 743	26	33	89 278	486	16	20 499	1 698 465	(W)	(W)
\$1,000,000 to \$2,499,999	1 296	112	25 351	1 994 561	60	56	86 186	1 236	56	25 351	1 908 375	1	2
\$500,000 to \$999,999	1 815	328	18 818	1 276 236	152	159	103 399	1 663	169	18 818	1 172 837	2	3
\$250,000 to \$499,999	2 909	894	15 938	1 027 867	368	339	126 023	2 541	555	15 938	901 844	3	3
\$100,000 to \$249,999	6 576	3 874	16 701	1 019 258	1 739	1 759	256 526	4 837	2 115	16 701	762 732	3	3
\$50,000 to \$99,999	6 665	5 153	6 888	473 119	3 472	3 568	239 669	3 193	1 585	6 888	233 450	4	3
\$25,000 to \$49,999	7 130	6 100	2 911	252 115	5 378	5 404	187 741	1 752	696	2 911	64 374	6	4
Less than \$25,000	26 765	25 492	2 418	219 998	24 607	24 495	195 680	2 158	997	2 418	24 318	4	4
\$10,000 to \$24,999	(NA)	(NA)	(NA)	(NA)	8 515	8 474	135 048	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999	(NA)	(NA)	(NA)	(NA)	5 773	5 751	39 099	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999	(NA)	(NA)	(NA)	(NA)	5 984	5 967	17 198	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500	(NA)	(NA)	(NA)	(NA)	4 335	4 303	4 335	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

¹For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

²For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	Construction industries and land subdividers and developers -----	20 572	209 154	165 730	5 482 516	4 038 240	280 437	22 575 712	16 844 405
15, 16, 17	Construction industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses-----	3 143	13 514	10 610	234 578	165 368	17 054	1 392 960	947 743
1522	Other residential buildings-----	264	2 489	1 629	66 147	37 417	2 412	355 627	144 358
1531	Operative builders-----	544	4 552	1 877	(D)	37 890	3 105	1 702 600	822 179
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	275	4 808	3 514	(D)	91 065	5 893	776 477	340 718
1542	Nonresidential buildings, n.e.c.-----	1 158	21 890	16 871	579 901	411 677	29 891	4 172 725	1 841 370
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction-----	422	11 351	9 403	344 965	262 137	16 426	1 543 635	1 216 720
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	57	2 393	2 054	61 309	47 730	3 673	257 699	200 690
1623	Water, sewer, and utility lines-----	345	5 715	4 612	171 968	120 933	8 520	657 443	561 886
1629	Heavy construction, n.e.c.-----	413	5 954	4 821	152 681	113 484	8 472	826 500	688 879
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning-----	3 116	28 475	21 487	813 625	602 623	38 659	2 596 230	2 333 609
1721	Painting and paper hanging-----	1 115	7 999	6 850	171 964	142 187	10 537	428 609	406 377
1731	Electrical work-----	1 881	23 636	18 903	761 382	595 241	35 392	1 970 662	1 916 645
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	946	7 644	6 723	176 045	146 246	10 432	483 462	463 456
1742	Plastering, drywall, and insulation work-----	501	9 706	8 313	255 376	200 157	12 782	648 472	609 535
1743	Terrazzo, tile, marble, and mosaic work-----	143	1 278	1 040	34 844	26 087	1 663	98 316	97 061
175	Carpentry and floor work:								
1751	Carpentry-----	1 532	11 316	9 768	258 584	208 008	15 535	820 248	737 080
1752	Floor laying and other floor work-----	324	2 597	1 959	63 167	43 757	3 577	234 677	219 044
1761	Roofing, siding, and sheet metal work-----	1 097	10 868	8 586	247 095	177 181	13 579	828 243	777 856
1771	Concrete work-----	1 090	12 599	10 909	295 466	235 161	17 147	1 118 152	998 816
1781	Water well drilling-----	84	508	389	11 129	8 410	803	44 119	43 426
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	180	2 839	2 329	81 826	63 511	3 991	240 950	214 675
1793	Glass and glazing work-----	135	1 385	968	34 591	20 931	1 638	107 588	103 151
1794	Excavation work-----	461	3 287	2 750	87 168	68 123	4 589	332 725	303 045
1795	Wrecking and demolition work-----	108	895	755	25 302	19 254	1 369	81 489	78 348
1796	Installing building equipment, n.e.c.-----	208	3 834	3 134	115 642	92 993	5 345	310 011	290 477
1799	Special trade contractors, n.e.c.-----	743	6 536	5 167	132 428	95 433	7 449	443 312	420 788
6552	Land subdividers and developers, n.e.c.-----	274	1 072	293	22 458	5 226	489	102 770	66 464

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts†	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
10 927 571	6 355 742	5 731 306	303 602	365 010	2 718 590	170 822	13 109 617	6 568 407	1	(W)	2	15, 16, 17
549 697 94 023	445 902 62 820	445 216 211 268	7 353 2 226	17 262 2 172	99 589 28 692	9 931 2 782	638 528 346 589	265 023 87 872	3 7	4 6	8 26	152 1521 1522
(D)	400 957	880 421	4 472	27 531	112 983	2 086	293 399	91 522	4	4	10	1531
203 067 1 257 118	170 294 635 431	435 759 2 331 355	6 152 26 880	4 166 26 683	43 903 252 775	5 986 12 706	830 067 1 868 686	251 813 517 785	4 3	3 2	14 9	154 1541 1542
798 258	480 179	326 915	63 830	53 103	511 025	9 710	891 452	388 370	1	1	3	1611
111 479 353 466 483 592	93 069 213 634 226 175	57 009 95 557 137 621	6 703 16 178 29 172	9 154 23 232 30 545	75 482 184 947 241 642	2 187 6 659 8 812	220 598 454 565 979 395	111 177 274 470 506 554	6 5 3	3 3 2	4 8 5	162 1622 1623 1629
1 407 347	960 607	262 620	31 540	33 194	220 938	23 125	1 541 560	870 934	1	1	6	1711
322 896	85 820	22 232	6 049	5 269	41 408	5 568	203 739	154 460	3	3	12	1721
1 264 271	671 243	54 017	19 480	22 132	160 590	20 347	1 342 311	863 287	1	1	6	1731
313 376 426 387 60 057	152 065 204 022 38 250	20 005 38 936 1 254	4 498 6 984 1 360	8 134 5 372 1 492	52 585 38 018 5 567	5 982 8 298 1 533	275 753 453 961 65 156	195 215 293 461 40 699	3 2 7	2 2 5	9 12 18	174 1741 1742 1743
462 223 128 879	282 358 97 364	83 167 15 633	5 382 3 154	7 551 1 956	55 748 14 013	6 521 1 633	338 596 98 428	181 554 52 863	2 5	2 4	10 20	175 1751 1752
495 388	292 850	50 387	10 132	10 081	89 967	10 535	641 758	378 480	2	2	7	1761
610 875	397 994	119 335	14 321	29 649	163 165	7 980	456 751	243 214	2	2	11	1771
26 919	(D)	692	673	3 295	15 053	437	27 039	15 613	8	7	6	1781
160 461 60 702 235 522 74 728 217 480 295 541	64 953 47 164 73 552 5 774 80 970 140 992	26 275 4 437 29 680 3 141 19 534 22 523	6 674 2 054 13 619 2 128 5 010 6 910	2 970 2 712 23 322 2 457 1 786 7 025	35 033 12 490 161 330 22 278 13 379 41 967	2 794 1 422 4 931 711 2 979 4 210	173 605 111 693 354 890 28 136 206 730 223 596	121 914 57 410 254 740 26 753 151 629 145 330	4 9 5 6 3 5	3 4 4 3 2 5	12 24 13 14 9 16	179 1791 1793 1794 1795 1796 1799
63 980	14 576	36 306	656	2 753	24 009	950	42 628	26 255	9	11	25	6552

Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see Introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year	20 572	18 318	21 048	19 150	1	1	2	2
Proprietors and working partners	4 569	6 238	11 835	12 006	3	3	3	3
All employees**	209 154	170 822	210 454	204 228	1	1	1	1
Construction workers:								
March	144 192	115 415	144 126	140 545	1	1	1	1
May	167 051	139 635	182 616	169 188	1	1	1	1
August	182 437	148 680	196 274	189 565	1	1	1	1
November	169 240	136 550	178 238	172 028	1	1	1	1
Average	165 730	136 888	175 461	169 612	1	1	1	1
Other employees:								
March	42 161	33 677	33 560	33 468	1	1	1	1
May	43 246	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
August	44 496	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
November	43 796	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Average	43 425	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March	58 824	44 188	(NA)	(NA)	1	1	(NA)	(NA)
April to June	70 803	53 848	(NA)	(NA)	1	1	(NA)	(NA)
July to September	78 991	58 799	(NA)	(NA)	1	1	(NA)	(NA)
October to December	71 817	53 066	(NA)	(NA)	1	1	(NA)	(NA)
Total hours worked	280 437	209 902	(NA)	(NA)	1	(W)	(NA)	(NA)
Payroll, all employees	5 482 516	3 763 634	3 338 788	2 450 245	(W)	(W)	(W)	1
Payroll, construction workers	4 038 240	2 914 586	2 659 319	1 981 109	(W)	(W)	(W)	1
Payroll, other employees	1 444 275	849 047	679 469	469 136	1	1	(W)	1
First quarter payroll, all employees	1 174 245	807 417	647 992	(NA)	(W)	(W)	(W)	(NA)
Employer costs for fringe benefits, all employees	1 375 032	667 616	677 138	(NA)	(W)	(W)	(W)	(NA)
Legally required expenditures	868 077	516 116	347 828	(NA)	(W)	(W)	(W)	(NA)
Voluntary expenditures	506 954	151 500	329 309	(NA)	1	1	(W)	(NA)
Dollar value of business done	23 293 696	13 462 761	12 337 808	8 565 546	1	(W)	(W)	1
Value of construction work ¹	22 575 712	13 109 617	11 866 811	8 292 766	1	(W)	(W)	1
Value of construction work subcontracted in from others	5 739 440	3 091 035	3 072 880	1 911 118	1	1	1	1
Land receipts ²	279 075	55 190	(NA)	(NA)	4	4	(NA)	(NA)
Other business receipts	438 908	297 953	470 997	272 780	2	1	3	4
Net value of construction†	16 844 405	10 119 024	9 125 152	6 137 428	(W)	(W)	(W)	1
Value added††	10 927 571	6 568 407	5 631 498	4 002 605	1	(W)	(W)	1
Selected costs	12 087 049	6 839 163	6 511 678	4 436 009	1	(W)	1	1
Materials, components, and supplies ³	6 022 245	3 580 983	3 587 580	2 280 671	1	1	1	1
Construction work subcontracted to others	5 731 306	2 990 592	2 741 659	2 155 338	1	1	1	2
Selected power, fuels, and lubricants	333 497	267 587	182 438	(NA)	1	1	1	(NA)
Electricity	45 583	35 584	23 518	(NA)	1	1	1	(NA)
Natural gas	24 059	20 120	15 743	(NA)	1	1	2	(NA)
Gasoline and diesel fuel	241 251	195 522	120 245	(NA)	1	1	1	(NA)
On highway use	171 622	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Off highway use	69 629	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Other, including lubricating oils and greases	22 603	16 359	22 934	(NA)	2	1	2	(NA)
Rental cost for machinery, equipment, and buildings	303 602	167 658	142 012	(NA)	1	1	1	(NA)
For machinery and equipment	205 571	118 194	112 773	82 736	2	1	1	2
For buildings	98 030	49 464	29 239	(NA)	2	2	1	(NA)
Selected purchased services	312 334	210 024	199 444	(NA)	1	1	5	(NA)
Communication services	85 847	55 974	61 493	(NA)	2	1	15	(NA)
Repairs to buildings and other structures	19 834	11 545	10 754	(NA)	3	3	5	(NA)
Repairs to machinery and equipment	206 653	142 505	127 197	(NA)	1	1	2	(NA)
Ownership of construction projects:								
Value of construction work	22 575 712	13 109 617	11 866 811	8 292 766	1	(W)	(W)	1
Government owned	4 530 383	2 916 357	2 315 532	2 032 873	1	1	1	2
Federal	950 073	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
State and local	3 580 309	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Privately owned	18 045 329	10 193 260	9 551 279	6 259 893	1	1	1	1

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

²Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

³For 1972, includes data for power, fuels, and lubricants.

Table 5. **Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	2 460 877	2 428 522	2	1
Capital expenditures, other than land -----	365 010	193 942	2	1
New -----	295 739	144 339	2	1
Used -----	69 271	49 602	4	3
Retirements and disposition of depreciable assets -----	107 297	114 923	6	5
End-of-year gross book value of depreciable assets -----	2 718 590	2 507 541	2	1
Depreciation charges during year -----	297 516	286 370	2	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	490 336	402 885	6	2
Capital expenditures, other than land -----	54 795	31 309	6	3
New buildings and other structures -----	45 417	23 201	7	3
Used buildings and other structures -----	9 378	8 108	10	9
Retirements and disposition of depreciable assets -----	18 604	24 696	18	18
End-of-year gross book value of depreciable assets -----	526 527	409 498	5	2
Depreciation charges during year -----	44 315	35 227	13	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 970 540	2 025 637	1	1
Capital expenditures, other than land -----	310 214	162 632	2	1
New machinery and equipment, including automobiles and trucks -----	250 321	121 138	2	1
New automobiles and trucks, intended primarily for highway use -----	117 205	44 024	3	2
Used machinery and equipment, including automobiles and trucks -----	59 893	41 494	4	2
Retirements and disposition of depreciable assets -----	88 692	90 227	6	3
End-of-year gross book value of depreciable assets -----	2 192 063	2 098 043	1	1
Depreciation charges during year -----	253 200	251 142	1	1

Table 6. **Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	20 572	1
Value of construction work	22 575 712	1
Establishments with inventories:		
Number	8 497	2
Value of construction work	12 001 314	1
Inventories ¹ :		
End of 1987, materials and supplies	289 325	3
End of 1986, materials and supplies	261 767	2
Establishments with no inventories:		
Number	9 171	2
Value of construction work	7 313 637	2
Establishments not reporting:		
Number	2 904	4
Value of construction work	3 260 761	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1987											
Number of establishments	20 572	11 262	4 656	2 531	1 460	419	193	41	7	1	
All employees**	209 154	23 487	29 767	33 595	43 071	29 112	28 575	13 659	7 885	(D)	
Payroll, all employees	5 482 516	385 620	588 820	794 398	1 255 948	908 062	925 930	429 160	194 575	(D)	
Construction worker hours (thousands)	280 437	27 487	36 949	40 290	58 025	40 665	42 147	21 165	13 706	(D)	
Dollar value business done	23 293 696	2 298 157	2 682 744	3 261 961	4 960 359	3 699 881	3 814 773	1 845 050	730 770	(D)	
Value of construction work ¹	22 575 712	2 197 235	2 600 193	3 156 444	4 789 060	3 600 654	3 716 304	1 786 950	728 871	(D)	
Net value of construction work†	16 844 405	1 661 032	2 051 367	2 485 534	3 661 684	2 707 967	2 500 096	1 776 725	(D)	(D)	
Value added††	10 927 571	971 478	1 263 357	1 591 264	2 401 230	1 763 118	1 676 894	873 809	386 420	(D)	
Cost of materials, components, supplies, and fuels	6 355 742	723 311	824 500	965 709	1 375 087	1 008 502	1 458 632	(D)	(D)	(D)	
Cost of construction work subcontracted to others	5 731 306	536 202	548 825	670 910	1 127 376	892 687	1 216 208	739 096	(D)	(D)	
Rental cost for machinery, equipment, and buildings	303 602	18 739	31 654	39 203	68 446	52 924	51 764	35 034	5 836	(D)	
Capital expenditures, other than land	365 010	39 283	58 760	58 498	81 197	62 836	37 878	24 794	1 762	(D)	
End-of-year gross book value of depreciable assets	2 718 590	309 289	378 107	397 331	604 645	444 578	350 605	197 294	36 740	(D)	
1982											
All employees**	170 822	23 443	21 258	24 311	30 740	21 514	24 699	11 486	8 019	5 352	
Value of construction work ¹	13 109 617	1 312 824	1 285 865	1 676 128	2 503 978	1 864 980	2 276 254	1 174 295	668 766	346 526	
Value added††	6 568 407	643 953	687 824	849 611	1 233 685	991 158	1 042 922	566 967	330 339	221 947	
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	1	2	3	2	1	2	(W)	(W)	(W)	(D)	
Net value of construction work†	(W)	3	3	2	1	1	(W)	(W)	(D)	(D)	
Capital expenditures, other than land	2	6	9	5	3	3	(W)	(W)	(W)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1987											
Number of establishments	20 572	(S)	(S)	(S)	5 443	3 747	2 641	2 151	956	459	357
All employees**	209 154	(S)	(S)	(S)	17 109	20 293	23 707	34 617	27 504	25 240	52 928
Payroll, all employees	5 482 516	(S)	(S)	(S)	238 448	360 340	519 692	886 533	817 209	814 707	1 770 356
Construction worker hours (thousands)	280 437	(S)	(S)	(S)	19 885	24 945	29 993	44 198	37 243	36 204	79 817
Dollar value of business done	23 293 696	(S)	(S)	(S)	886 005	1 303 112	1 866 355	3 363 790	3 300 247	3 212 183	9 097 789
Value of construction work ¹	22 575 712	(S)	(S)	(S)	867 753	1 273 612	1 821 067	3 271 615	3 183 695	3 104 615	8 794 091
Net value of construction work†	16 844 405	(S)	(S)	(S)	801 627	1 149 608	1 595 335	2 703 038	2 474 992	2 410 016	5 467 427
Value added††	10 927 571	(S)	(S)	(S)	491 908	708 911	990 251	1 713 013	1 642 872	1 566 941	3 660 122
Cost of materials, components, supplies, and fuels	6 355 742	(S)	(S)	(S)	323 599	460 550	630 325	1 044 371	906 006	913 178	1 985 200
Cost of construction work subcontracted to others	5 731 306	(S)	(S)	(S)	66 125	124 003	225 731	568 577	708 702	694 599	3 326 663
Rental cost for machinery, equipment, and buildings	303 602	(S)	(S)	(S)	10 535	15 605	28 096	42 646	44 422	45 643	113 704
Capital expenditures, other than land	365 010	(S)	(S)	(S)	22 888	32 368	38 160	60 493	58 907	50 350	95 544
End-of-year gross book value of depreciable assets	2 718 590	(S)	(S)	(S)	156 046	209 883	269 802	433 303	444 264	365 010	787 483
1982											
All employees**	170 822	2 418	2 911	6 888	16 701	15 938	18 818	25 351	20 499	18 847	42 449
Value of construction work ¹	13 109 617	23 860	63 343	230 006	746 659	875 203	1 141 265	1 858 509	1 666 266	1 674 939	4 829 565
Value added††	6 568 407	13 098	33 479	128 388	409 649	478 441	612 922	1 014 597	857 717	807 919	2 212 193
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	1	(S)	(S)	(S)	3	3	3	2	1	1	(W)
Net value of construction work†	(W)	(S)	(S)	(S)	3	3	3	2	2	1	(W)
Capital expenditures, other than land	2	(S)	(S)	(S)	9	10	8	5	7	4	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work ¹				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction ²	Maintenance and repair				
	A	B	C	D	A	B	C	D
1987								
Value of construction work ¹	22 575 712	14 091 240	4 817 260	2 855 353	1	1	1	1
Building construction	17 261 321	11 529 775	3 610 898	2 074 030	1	1	1	2
Single-family houses	5 200 568	3 994 122	709 312	497 134	2	2	4	4
Single-family houses, detached	4 287 698	3 188 149	662 651	436 897	2	3	4	4
Single-family houses, attached	912 869	805 973	46 660	60 236	4	4	9	8
Apartment buildings with two or more apartments	957 979	706 635	134 314	117 029	2	2	4	4
Other residential buildings, including hotels and motels	572 263	399 463	110 607	62 192	3	3	6	5
Hotels and motels	417 442	316 395	72 024	29 022	2	1	8	3
Other residential buildings, excluding hotels and motels	154 820	83 067	38 582	33 170	8	14	8	8
Office buildings	2 778 084	1 783 419	694 869	299 795	1	1	3	2
Other commercial buildings such as stores, restaurants, and automobile service stations	2 607 050	1 696 355	583 240	327 454	2	2	2	4
Industrial buildings and warehouses	2 910 378	1 746 326	692 962	471 090	1	1	1	2
Industrial buildings	2 487 518	1 457 184	611 682	418 651	1	1	1	2
Warehouses	422 860	289 142	81 279	52 438	3	3	5	4
Religious buildings	213 699	104 928	64 868	43 902	3	2	5	5
Educational buildings	634 445	255 883	273 079	105 482	2	2	2	5
Hospitals and institutional buildings	765 066	421 735	260 364	82 965	2	2	3	3
Farm buildings	93 382	57 247	10 993	25 141	10	13	9	19
Amusement, social, and recreational buildings	169 792	128 483	23 718	17 580	2	1	7	12
Other nonresidential buildings	311 997	235 169	52 572	24 266	2	1	4	8
Land development for buildings	46 618	(NA)	(NA)	(NA)	12	(NA)	(NA)	(NA)
Nonbuilding construction	4 549 151	2 561 465	1 206 362	781 324	1	1	1	2
Highways, streets, and related facilities	1 690 681	734 956	558 068	397 655	1	2	1	3
Parking areas including private driveways	168 206	101 491	31 026	35 688	8	9	15	11
Bridges, tunnels, and elevated highways	314 201	209 003	(D)	(D)	2	2	(D)	(D)
Tunnels	57 986	48 230	(D)	(D)	1	1	(D)	(D)
Bridges and elevated highways	256 214	160 773	70 560	24 880	2	3	1	7
Marine construction	112 318	33 638	(D)	(D)	3	(W)	(D)	(D)
Power and communication transmission lines, towers, and related facilities	91 133	45 865	27 801	17 465	7	8	13	8
Sewers, water mains, and related facilities	580 991	443 936	87 559	49 496	3	3	4	6
Sewers, sewer lines, and related facilities	407 787	307 273	65 819	34 695	3	3	4	7
Water mains and related facilities	173 204	136 662	21 739	14 801	3	4	8	9
Pipeline, other than sewer or water lines	103 208	69 170	19 976	14 061	1	1	1	5
Blast furnaces, petroleum refineries, and chemical complexes	232 976	119 079	62 163	51 734	1	(W)	2	4
Power plants	370 512	196 918	129 679	43 914	1	2	1	3
Power plants, nuclear	169 395	(D)	(D)	22 514	(W)	(D)	(D)	1
Power plants, except nuclear	201 117	(D)	(D)	21 400	2	(D)	(D)	7
Sewage treatment and water treatment plants	463 509	324 721	122 923	15 863	3	3	7	11
Sewage treatment plants	412 634	290 510	110 011	12 112	3	3	8	13
Water treatment plants	50 874	34 211	12 912	3 750	3	2	7	13
Other nonbuilding construction	421 416	282 688	67 015	71 725	7	9	8	9
Construction work, n.s.k.	765 239	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
1982								
Value of construction work ¹	13 109 617	9 711 187	(NA)	3 398 429	(W)	(W)	(NA)	1
Building construction	8 801 729	6 592 084	(NA)	2 209 645	1	(W)	(NA)	1
Single-family houses	1 729 849	1 215 350	(NA)	514 498	2	2	(NA)	2
Single-family houses, detached	1 474 130	1 004 886	(NA)	469 243	2	2	(NA)	2
Single-family houses, attached	255 719	210 463	(NA)	45 255	3	3	(NA)	3
Apartment buildings with two or more apartments	717 130	585 063	(NA)	132 066	1	1	(NA)	3
Other residential buildings, including hotels and motels	180 877	137 028	(NA)	43 849	3	4	(NA)	3
Office buildings	1 840 336	1 377 551	(NA)	462 785	1	1	(NA)	1
Other commercial buildings such as stores, restaurants, and automobile service stations	790 975	575 092	(NA)	215 882	2	2	(NA)	3
Industrial buildings and warehouses	2 103 706	1 589 285	(NA)	514 421	1	1	(NA)	1
Industrial buildings	1 814 798	1 359 587	(NA)	455 211	1	1	(NA)	2
Warehouses	288 907	229 697	(NA)	59 210	2	2	(NA)	3
Religious buildings	123 239	77 867	(NA)	45 371	2	2	(NA)	3
Educational buildings	344 686	230 875	(NA)	113 811	2	2	(NA)	3
Hospitals and institutional buildings	694 811	578 715	(NA)	116 096	1	1	(NA)	2
Farm buildings	94 871	74 059	(NA)	20 812	8	10	(NA)	7
Amusement, social, and recreational buildings	109 716	99 540	(NA)	10 176	3	3	(NA)	8
Other nonresidential buildings	71 533	55 651	(NA)	19 878	6	9	(NA)	9
Nonbuilding construction	3 503 102	2 476 446	(NA)	1 026 656	(W)	(W)	(NA)	1
Highways, streets, and related facilities	966 111	542 852	(NA)	423 259	1	1	(NA)	2
Bridges, tunnels, and elevated highways	289 750	244 482	(NA)	45 268	1	1	(NA)	4
Tunnels	102 610	96 709	(NA)	5 900	2	1	(NA)	8
Bridges and elevated highways	187 140	147 772	(NA)	39 367	2	1	(NA)	5
Power and communication transmission lines, towers, and related facilities	204 452	170 384	(NA)	34 068	2	2	(NA)	4
Sewers, water mains, and related facilities	337 566	264 095	(NA)	73 470	2	2	(NA)	4
Sewers, sewer lines, and related facilities	233 448	192 201	(NA)	41 246	3	3	(NA)	4
Water mains and related facilities	104 118	71 894	(NA)	32 224	4	4	(NA)	6
Pipeline, other than sewer or water lines	107 363	78 423	(NA)	28 939	1	1	(NA)	1
Mass transit construction	114 204	61 923	(NA)	52 281	(W)	(W)	(NA)	1
Blast furnaces, petroleum refineries, and chemical complexes	304 028	195 839	(NA)	108 188	(W)	(W)	(NA)	(W)
Power plants	551 045	434 543	(NA)	116 502	(W)	(W)	(NA)	2
Power plants, nuclear	360 879	309 842	(NA)	51 037	(W)	(W)	(NA)	(W)
Power plants, except nuclear	190 165	124 700	(NA)	65 465	1	(W)	(NA)	3
Sewage treatment and water treatment plants	285 324	255 928	(NA)	29 395	1	1	(NA)	3
Sewage treatment plants	206 910	189 333	(NA)	17 576	1	1	(NA)	4
Water treatment plants	78 413	66 594	(NA)	11 819	2	2	(NA)	3
Other nonbuilding construction	343 259	227 976	(NA)	115 286	4	5	(NA)	5
Construction work, n.s.k.	804 785	642 656	(NA)	162 128	2	2	(NA)	3

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.
²In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".

Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
		A	B	C	D	E	F	G
	Construction industries and land subdividers and developers -----	20 572	165 730	280 437	144 192	58 824	167 051	70 803
15, 16, 17	Construction industries:							
15	Building construction—General contractors and operative builders:							
152	General contractors, residential buildings:							
1521	Single-family houses -----	3 143	10 610	17 054	9 397	3 559	10 685	4 251
1522	Other residential buildings -----	264	1 629	2 412	1 514	555	1 685	621
1531	Operative builders -----	544	1 877	3 105	1 696	684	1 844	777
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	275	3 514	5 893	3 276	1 355	3 346	1 438
1542	Nonresidential buildings, n.e.c. -----	1 158	16 871	29 891	15 400	6 567	16 264	7 113
16	Heavy construction other than building construction—contractors:							
1611	Highway and street construction -----	422	9 403	16 426	4 560	1 769	10 540	4 564
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	57	2 054	3 673	1 641	696	2 055	911
1623	Water, sewer, and utility lines -----	345	4 612	8 520	3 502	1 536	4 785	2 179
1629	Heavy construction, n.e.c. -----	413	4 821	8 472	3 823	1 536	4 882	2 201
17	Special trade contractors:							
1711	Plumbing, heating, and air-conditioning ----	3 116	21 487	38 659	20 950	9 174	21 481	9 615
1721	Painting and paper hanging -----	1 115	6 850	10 537	5 788	2 147	6 945	2 652
1731	Electrical work -----	1 881	18 903	35 392	18 119	8 277	18 238	8 712
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	946	6 723	10 432	5 661	2 012	6 827	2 731
1742	Plastering, drywall, and insulation work --	501	8 313	12 782	8 033	3 075	8 203	3 229
1743	Terrazzo, tile, marble, and mosaic work --	143	1 040	1 663	949	353	1 008	378
175	Carpentry and floor work:							
1751	Carpentry -----	1 532	9 768	15 535	8 826	3 472	9 998	3 959
1752	Floor laying and other floor work -----	324	1 959	3 577	2 017	896	1 984	877
1761	Roofing, siding, and sheet metal work -----	1 097	8 586	13 579	7 264	2 834	8 749	3 462
1771	Concrete work -----	1 090	10 909	17 147	7 919	2 856	11 882	4 701
1781	Water well drilling -----	84	389	803	354	164	392	212
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	180	2 329	3 991	2 161	877	2 198	956
1793	Glass and glazing work -----	135	968	1 638	944	433	930	373
1794	Excavation work -----	461	2 750	4 589	2 122	805	2 919	1 209
1795	Wrecking and demolition work -----	108	755	1 369	722	323	785	369
1796	Installing building equipment, n.e.c. -----	208	3 134	5 345	2 954	1 267	2 961	1 305
1799	Special trade contractors, n.e.c. -----	743	5 167	7 449	4 317	1 478	5 148	1 869
6552	Land subdividers and developers, n.e.c. --	274	293	489	272	111	305	127

¹Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
182 437	78 991	169 240	71 817	1	1	1	1	1	1	1	1	1	1	15, 16, 17
														15
12 113 1 728	4 988 665	10 245 1 587	4 253 569	3 9	4 9	3 8	5 8	3 9	4 9	4 10	5 11	3 10	4 11	152 1521 1522
2 030	838	1 936	804	7	8	7	8	7	8	8	8	7	8	1531
														154
3 709 19 187	1 594 8 552	3 726 16 632	1 506 7 658	4 4	4 3	4 4	4 3	4 3	5 3	4 4	4 3	4 4	4 4	1541 1542
														16
12 250	5 736	10 263	4 355	1	2	2	3	1	2	2	2	2	2	1611
														162 1622
2 398 5 221 5 428	1 123 2 527 2 494	2 120 4 940 5 153	941 2 277 2 239	6 5 3	9 6 3	5 3 3	8 5 3	7 5 3	10 6 4	7 6 3	10 7 3	6 7 2	9 7 3	1623 1629
														17
22 329	10 199	21 188	9 669	1	1	1	1	1	1	1	2	1	2	1711
7 866	3 065	6 801	2 671	3	4	3	4	4	4	4	5	3	4	1721
19 586	9 223	19 666	9 179	1	1	1	1	1	1	1	2	1	2	1731
														174
7 279 8 569 1 089	3 070 3 311 480	7 128 8 446 1 116	2 617 3 166 450	3 2 7	4 2 7	3 2 7	4 2 7	3 2 7	4 2 8	4 2 7	5 2 7	4 2 8	4 2 8	1741 1742 1743
10 587 1 986	4 214 919	9 672 1 850	3 888 883	2 5	3 6	2 6	4 7	2 5	3 7	3 5	3 7	2 5	4 6	175 1751 1752
9 653	3 952	8 678	3 330	2	3	2	4	3	3	2	3	2	3	1761
12 507	5 140	11 328	4 448	2	3	4	4	2	3	2	3	3	3	1771
414	221	395	205	8	11	10	11	8	11	9	13	7	11	1781
														179
2 391 984	986 406	2 565 1 015	1 170 426	4 8	5 11	4 9	6 16	4 9	6 11	5 8	6 9	3 8	4 9	1791 1793
3 032 797	1 300 344	2 926 716	1 275 332	5 6	6 7	5 8	7 11	6 9	7 8	5 7	6 7	5 7	7 7	1794 1795
3 233	1 389	3 389	1 383	4 3	3 3	2 2	2 2	2 3	3 5	5 4	4 5	5 5	5 6	1796
5 750	2 111	5 457	1 991	5 5	5 5	4 4	5 5	5 5	5 5	5 5	6 6	5 5	6 6	1799
307	129	286	120	21	21	16	17	23	24	28	27	20	21	6552

Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	Construction industries and land subdividers and developers	10.2	26.2	1 692.1	136.2	.243	.282	.254	.013
15, 16, 17	Construction industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses	4.3	15.9	1 557.0	125.9	.161	.367	.292	.008
1522	Other residential buildings	7.7	19.2	1 674.0	161.1	.162	.280	.386	.005
1531	Operative builders	7.0	27.9	1 983.8	913.8	.085	(D)	.517	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses	21.3	28.4	1 729.2	252.9	.148	.177	.668	.010
1542	Nonresidential buildings, n.e.c.	10.8	25.3	1 780.3	275.4	.124	.170	.587	.005
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction	17.3	27.1	1 809.5	181.6	.178	.346	.194	.029
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction	20.5	33.9	1 896.8	199.4	.204	.388	.264	.010
1623	Water, sewer, and utility lines	16.5	26.7	1 881.1	125.9	.254	.328	.131	.033
1629	Heavy construction, n.e.c.	14.2	25.5	1 741.1	119.7	.262	.261	.142	.026
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning	8.6	25.2	1 817.2	120.7	.279	.369	.111	.013
1721	Painting and paper hanging	6.8	20.4	1 646.2	62.8	.378	.237	.110	.014
1731	Electrical work	9.6	29.5	1 833.3	104.1	.362	.341	.034	.011
174	Masonry, stoneowrk, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework	5.8	21.7	1 533.2	70.1	.351	.312	.034	.011
1742	Plastering, drywall, and insulation work	10.2	22.0	1 499.6	83.8	.310	.382	.110	.010
1743	Terrazzo, tile, marble, and mosaic work	4.1	24.2	1 918.7	90.0	.328	.409	.012	.005
175	Carpentry and floor work:								
1751	Carpentry	5.7	19.3	1 633.5	70.3	.321	.378	.084	.007
1752	Floor laying and other floor work	6.0	22.9	1 965.7	116.7	.264	.448	.098	.012
1761	Roofing, siding, and sheet metal work	9.9	22.2	1 650.9	100.5	.278	.391	.078	.013
1771	Concrete work	6.8	21.3	1 541.7	101.7	.247	.383	.055	.014
1781	Water well drilling	4.2	19.6	2 148.7	113.9	.229	(D)	.010	.010
179	Miscellaneous special trade contractors:								
1791	Structural steel erection	18.1	27.9	1 519.4	118.2	.287	.268	.089	.023
1793	Glass and glazing work	9.0	24.7	1 773.4	125.6	.275	.493	.029	.015
1794	Excavation work	5.6	22.9	1 686.0	112.4	.249	.270	.073	.042
1795	Wrecking and demolition work	8.5	27.2	1 825.3	156.9	.217	.112	.073	.065
1796	Installing building equipment, n.e.c.	17.0	30.9	1 774.8	109.6	.344	.194	.172	.015
1799	Special trade contractors, n.e.c.	9.0	18.4	1 447.2	72.6	.313	.346	.073	.017
6552	Land subdividers and developers, n.e.c.	4.5	23.6	1 600.0	377.4	.239	.126	.438	.003

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work, sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO-GARY-LAKE COUNTY, IL-IN-WI CMSA											
	Construction Industries and land subdividers and developers	13 969	167 514	4 588 978	18 684 577	13 696 027	8 985 397	5 058 317	4 988 550	258 689	1	1
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 967	9 781	181 330	1 096 506	722 962	422 518	341 854	373 544	13 780	4	5
1522	Other residential buildings	205	2 151	60 285	321 890	129 224	83 046	58 019	192 666	2 097	7	6
1531	Operative builders	439	4 077	131 430	1 638 360	783 288	434 551	373 285	855 072	26 665	4	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	235	3 488	108 470	627 801	253 132	159 361	127 588	374 669	2 925	4	4
1542	Nonresidential buildings, n.e.c.	656	16 426	442 295	3 413 653	1 416 569	1 003 036	445 440	1 997 084	17 805	4	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	204	5 936	192 031	870 027	650 677	431 593	263 317	219 349	25 641	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	30	1 268	35 015	140 784	107 253	58 550	48 964	33 531	5 780	4	3
1623	Water, sewer, and utility lines	258	5 478	163 860	557 522	476 006	313 282	(D)	81 516	16 996	5	3
1629	Heavy construction, n.e.c.	166	4 812	142 579	726 059	570 850	398 739	184 498	155 210	10 321	2	2
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	2 001	23 316	711 432	2 154 379	1 925 413	1 184 055	768 069	228 966	26 328	1	1
1721	Painting and paper hanging	828	7 118	156 699	385 321	364 149	290 078	76 615	21 172	4 396	4	3
1731	Electrical work	1 335	20 070	675 615	1 721 968	1 675 937	1 116 904	572 035	46 032	15 389	1	1
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	672	6 148	148 852	405 511	387 399	272 450	117 125	18 113	6 883	3	3
1742	Plastering, drywall, and insulation work	382	8 025	218 187	543 988	512 942	360 427	165 460	31 046	4 191	2	2
1743	Terrazzo, tile, marble, and mosaic work	110	1 068	30 931	86 657	85 931	53 514	33 190	726	1 291	5	5
175	Carpentry and floor work:											
1751	Carpentry	1 065	9 923	234 348	724 123	656 866	409 811	253 027	67 256	6 105	3	2
1752	Floor laying and other floorwork	243	2 289	57 540	211 030	196 586	114 718	86 285	14 444	1 870	5	4
1761	Roofing, siding, and sheet metal work	808	8 512	195 939	660 745	616 722	387 668	236 033	44 023	8 906	3	2
1771	Concrete work	876	11 180	264 327	999 186	892 839	539 818	359 679	106 346	22 698	2	2
1781	Water well drilling	36	338	8 636	31 865	31 388	18 931	(D)	477	2 769	2	3
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	118	2 217	65 336	189 095	171 136	128 737	51 588	17 959	2 029	3	3
1793	Glass and glazing work	105	1 169	31 609	98 490	94 309	54 759	43 384	4 181	2 344	8	4
1794	Excavation work	294	2 537	74 131	282 428	255 182	201 698	59 607	27 246	20 509	5	4
1795	Wrecking and demolition work	72	715	22 256	73 232	70 599	67 259	4 459	2 633	2 299	5	3
1796	Installing building equipment, n.e.c.	142	3 295	102 999	275 589	254 977	191 197	73 376	20 613	1 441	4	2
1799	Special trade contractors, n.e.c.	526	5 365	114 075	364 414	343 996	237 763	118 777	20 418	5 175	5	4
6552	Land subdividers and developers, n.e.c.	198	813	18 771	83 953	49 696	50 934	10 018	34 258	2 060	8	11
	AURORA-ELGIN, IL PMSA											
	Construction Industries and land subdividers and developers	829	7 281	181 762	737 670	579 281	375 721	224 658	158 389	17 714	3	3
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	117	548	10 455	62 014	32 524	17 293	(D)	29 489	*615	13	17
1522	Other residential buildings	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders	26	95	4 888	57 523	20 390	*12 926	(D)	37 133	(D)	9	33
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	37	292	8 104	46 453	26 005	17 944	8 464	20 449	530	17	18
1542	Nonresidential buildings, n.e.c.	31	523	12 455	64 003	38 284	24 965	13 327	25 720	465	13	13

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	AURORA-ELGIN, IL PMSA—Con.											
	Construction industries and land subdividers and developers—Con.											
15,16, 17 16	Construction industries—Con.											
	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	8	134	4 133	21 302	(D)	11 838	6 094	(D)	(D)	(W)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines-----	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1629	Heavy construction, n.e.c.-----	11	340	10 341	40 628	34 816	23 686	(D)	5 812	2 485	10	7
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	109	684	16 838	55 424	52 664	32 521	22 672	2 760	1 717	7	8
1721	Painting and paper hanging-----	51	266	4 774	15 532	15 232	11 771	*3 477	*299	*435	19	32
1731	Electrical work -----	64	739	18 978	49 396	48 421	36 762	(D)	975	1 255	10	9
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	29	250	6 476	15 957	15 715	10 441	5 282	242	279	13	8
1742	Plastering, drywall, and insulation work -----	27	416	11 836	36 528	35 108	21 955	(D)	1 420	634	6	6
1743	Terrazzo, tile, marble, and mosaic work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
175	Carpentry and floor work:											
1751	Carpentry -----	85	463	7 729	35 201	30 655	17 375	14 096	4 546	519	17	25
1752	Floor laying and other floorwork-----	9	16	340	1 236	1 230	585	(D)	6	*5	8	11
1761	Roofing, siding, and sheet metal work -----	45	575	13 913	52 321	49 017	29 032	20 031	3 304	735	10	9
1771	Concrete work -----	61	886	21 755	76 596	71 567	42 177	29 451	*5 029	1 090	13	11
1781	Water well drilling -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	6	95	2 554	5 074	4 456	4 557	(D)	618	95	(W)	(W)
1793	Glass and glazing work -----	6	49	1 201	4 509	4 162	2 217	2 165	*347	*42	2	27
1794	Excavation work -----	28	321	12 248	45 388	(D)	29 038	8 374	(D)	3 868	12	(D)
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.-----	*19	*178	*2 813	*8 736	*8 644	*5 526	(D)	92	-	58	45
1799	Special trade contractors, n.e.c.-----	22	161	2 937	8 657	8 394	5 551	3 222	263	62	19	27
6552	Land subdividers and developers, n.e.c.-----	16	33	1 296	*11 185	5 723	5 722	207	*5 462	82	11	32
	CHICAGO, IL PMSA											
	Construction industries and land subdividers and developers-----	9 918	128 485	3 598 988	15 065 422	10 779 420	7 080 204	3 958 061	4 286 002	192 799	1	1
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	1 279	6 187	119 035	767 813	499 979	299 596	223 131	267 834	8 935	5	6
1522	Other residential buildings -----	167	1 934	56 735	295 592	114 274	75 289	50 380	181 318	2 019	7	6
1531	Operative builders -----	324	3 462	112 131	1 375 256	634 351	362 997	293 015	740 905	22 210	5	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	151	2 649	83 097	513 880	193 629	119 357	103 746	320 251	1 905	5	4
1542	Nonresidential buildings, n.e.c.-----	499	14 642	397 503	3 124 238	1 276 085	916 026	385 394	1 848 154	15 390	4	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	164	4 430	151 204	686 630	505 863	336 017	203 017	180 766	22 409	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	24	1 132	31 513	128 894	96 217	50 472	45 976	32 677	5 633	3	3
1623	Water, sewer, and utility lines-----	174	3 234	99 706	383 428	319 370	194 187	(D)	64 057	12 648	9	4
1629	Heavy construction, n.e.c.-----	80	2 422	67 526	433 408	368 006	261 443	115 788	65 402	4 798	4	2

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO, IL PMSA—Con.											
	Construction industries and land subdividers and developers—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	1 454	17 287	524 071	1 677 835	1 480 963	883 049	616 951	196 873	18 718	1	1
1721	Painting and paper hanging-----	615	5 544	126 142	309 799	290 777	230 549	62 392	19 022	3 122	4	3
1731	Electrical work -----	1 012	16 479	570 826	1 443 499	1 403 976	929 403	481 980	39 522	12 026	1	1
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	494	4 648	113 330	302 450	288 322	201 265	88 905	14 128	4 682	4	3
1742	Plastering, drywall, and insulation work-----	285	6 590	186 219	454 104	426 242	304 774	134 105	27 862	3 188	2	2
1743	Terrazzo, tile, marble, and mosaic work-----	88	972	29 312	81 311	(D)	50 604	30 626	(D)	1 204	6	(D)
175	Carpentry and floor work:											
1751	Carpentry-----	737	7 925	199 044	601 348	547 993	344 183	206 575	53 355	4 587	2	2
1752	Floor laying and other floorwork-----	172	2 009	52 370	193 721	180 227	103 863	79 436	13 494	1 572	5	4
1761	Roofing, siding, and sheet metal work-----	571	6 420	149 763	497 785	465 892	300 820	171 501	31 892	6 489	3	2
1771	Concrete work-----	578	8 030	192 268	738 716	645 043	395 628	255 184	93 674	17 322	3	2
1781	Water well drilling-----	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	73	1 510	47 877	138 422	125 791	93 268	40 260	12 631	911	4	4
1793	Glass and glazing work-----	79	942	25 881	79 181	76 161	43 533	34 278	3 021	2 086	9	5
1794	Excavation work-----	145	1 406	41 516	153 498	140 209	113 211	30 673	13 289	10 607	6	5
1795	Wrecking and demolition work-----	68	699	21 925	71 736	69 134	65 888	4 341	2 602	2 270	5	3
1796	Installing building equipment, n.e.c.-----	101	2 794	88 571	236 980	220 922	164 417	63 582	16 059	1 422	2	1
1799	Special trade contractors, n.e.c.-----	412	4 381	94 485	304 919	286 145	198 181	98 059	18 774	4 275	6	4
6552	Land subdividers and developers, n.e.c.-----	164	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	GARY-HAMMOND, IN PMSA											
	Construction industries and land subdividers and developers-----	887	11 173	294 825	913 538	754 038	524 658	255 823	159 500	10 514	2	2
	(See appropriate State for SIC detail.)											
	JOLIET, IL PMSA											
	Construction industries and land subdividers and developers-----	878	8 171	219 418	745 524	621 815	403 190	230 669	123 709	13 010	2	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses-----	157	781	12 405	57 195	46 383	22 037	28 382	10 812	841	11	14
1522	Other residential buildings-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1531	Operative builders-----	38	112	4 782	44 633	22 078	*7 565	14 666	22 555	*318	26	37
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	7	155	6 089	27 776	12 441	8 494	(D)	15 335	242	(W)	(W)
1542	Nonresidential buildings, n.e.c.-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction-----	12	832	19 711	86 911	64 532	42 692	(D)	22 379	586	(W)	(W)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines-----	9	165	6 572	28 608	23 814	17 362	6 483	4 793	1 689	1	7
1629	Heavy construction, n.e.c.-----	22	311	9 018	37 984	27 459	17 155	11 169	10 525	1 060	10	8

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	JOLIET, IL PMSA—Con.											
	Construction industries and land subdividers and developers—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	102	1 817	69 550	149 330	142 331	101 733	41 456	6 999	1 475	4	4
1721	Painting and paper hanging	28	152	3 716	8 608	8 327	7 081	1 245	(S)	*32	16	20
1731	Electrical work	55	414	14 266	38 317	37 522	26 519	11 101	795	503	12	9
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	31	332	8 202	21 019	20 235	13 854	(D)	784	*531	13	14
1742	Plastering, drywall, and insulation work	23	509	6 193	16 308	15 969	10 115	(D)	339	*115	9	16
1743	Terrazzo, tile, marble, and mosaic work	*15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	71	615	12 325	42 924	38 468	25 019	(D)	4 456	158	16	11
1752	Floor laying and other floorwork	*20	*44	*1 168	*3 480	(D)	*3 101	410	(D)	*143	42	(D)
1761	Roofing, siding, and sheet metal work	60	418	9 125	29 949	28 477	17 512	(D)	1 472	607	21	16
1771	Concrete work	72	537	12 627	48 984	46 944	26 797	(D)	2 039	1 476	8	6
1781	Water well drilling	10	116	3 166	11 485	(D)	6 756	4 643	(D)	427	9	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	17	193	4 972	16 810	(D)	9 593	5 845	(D)	231	8	(D)
1793	Glass and glazing work	5	28	550	1 747	(D)	899	893	(D)	(D)	(W)	(D)
1794	Excavation work	38	133	3 836	13 903	13 193	11 004	2 814	710	(S)	29	24
1795	Wrecking and demolition work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1796	Installing building equipment, n.e.c.	6	28	528	1 618	(D)	1 183	442	(D)	(D)	(W)	(D)
1799	Special trade contractors, n.e.c.	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
6552	Land subdividers and developers, n.e.c.	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	KENOSHA, WI PMSA											
	Construction industries and land subdividers and developers	212	1 792	42 656	142 091	115 591	74 906	46 737	26 500	3 126	6	6
	(See appropriate State for SIC detail.)											
	LAKE COUNTY, IL PMSA											
	Construction industries and land subdividers and developers	1 245	10 612	251 329	1 080 332	845 882	526 718	342 369	234 450	21 526	2	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	247	1 402	24 865	132 814	85 651	52 224	36 291	47 163	1 929	9	9
1522	Other residential buildings	*19	128	1 681	14 093	6 003	3 735	(D)	8 090	(D)	40	34
1531	Operative builders	18	268	6 902	116 693	78 015	39 640	(D)	38 678	(D)	13	9
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c.	60	667	17 967	134 133	58 704	32 459	(D)	75 429	923	12	16
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	5	288	10 333	43 987	(D)	20 572	(D)	(D)	(D)	(W)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	—	—	—	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines	34	296	9 418	48 236	43 824	25 577	18 256	4 412	2 017	11	7
1629	Heavy construction, n.e.c.	17	301	8 641	49 116	(D)	19 669	10 397	(D)	(D)	9	(D)

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	LAKE COUNTY, IL PMSA—Con.											
	Construction industries and land subdividers and developers—Con. Construction industries—Con.											
15,16, 17 17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	174	1 215	28 028	91 733	85 467	50 774	35 472	6 266	1 493	6	5
1721	Painting and paper hanging	74	584	10 914	25 018	24 519	20 847	3 713	499	160	18	16
1731	Electrical work	121	1 078	28 539	86 434	83 236	52 087	32 046	3 198	1 260	7	5
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	71	634	14 711	41 145	40 656	28 019	(D)	489	835	5	8
1742	Plastering, drywall, and insulation work	17	300	8 761	23 030	22 278	16 075	(D)	752	119	10	15
1743	Terrazzo, tile, marble, and mosaic work	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floorwork	17	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1761	Roofing, siding, and sheet metal work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1771	Concrete work	97	1 040	26 867	93 221	88 197	51 935	37 012	5 024	1 990	6	5
1781	Water well drilling	8	75	2 036	7 146	(D)	4 587	2 432	(D)	354	5	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	12	(D)	(D)	(D)	11 199	(D)	(D)	(D)	(D)	(D)	6
1793	Glass and glazing work	9	(D)	(D)	(D)	5 775	(D)	(D)	(S)	96	(D)	15
1794	Excavation work	40	469	12 839	56 587	52 285	39 020	13 716	4 302	3 334	6	6
1795	Wrecking and demolition work	-	-	-	-	-	-	-	-	-	-	-
1796	Installing building equipment, n.e.c.	6	62	1 929	(D)	(D)	3 422	1 030	(D)	(D)	(W)	(D)
1799	Special trade contractors, n.e.c.	29	333	8 069	19 574	19 159	14 444	6 184	414	(D)	11	15
6552	Land subdividers and developers, n.e.c.	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	ST. LOUIS, MO-IL MSA											
	Construction industries and land subdividers and developers	5 351	61 400	1 598 630	6 658 679	4 806 553	3 188 121	1 877 503	1 852 126	95 388	1	1
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	866	4 579	81 933	392 966	300 473	196 925	115 962	92 493	5 316	5	4
1522	Other residential buildings	80	526	11 287	124 668	50 706	28 131	25 374	73 962	*1 119	12	10
1531	Operative builders	212	2 566	73 973	628 909	377 437	158 849	233 104	251 472	3 775	5	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	79	3 900	122 062	731 698	412 174	313 735	107 982	319 524	8 158	3	2
1542	Nonresidential buildings, n.e.c.	379	6 827	214 870	1 396 902	600 433	484 636	274 466	796 469	6 332	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	101	2 483	67 636	318 135	260 064	165 043	99 206	58 071	7 755	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	10	280	6 906	34 311	25 679	11 018	14 681	8 633	466	17	11
1623	Water, sewer, and utility lines	54	1 036	26 793	98 318	84 897	57 373	27 630	13 421	4 419	6	4
1629	Heavy construction, n.e.c.	85	1 692	44 764	206 212	170 241	131 162	(D)	35 970	17 293	5	4

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	ST. LOUIS, MO-IL MSA—Con.											
15,16, 17 17	Construction industries and land subdividers and developers—Con. Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	743	7 787	224 872	702 999	606 288	344 783	(D)	96 712	6 049	2	2
1721	Painting and paper hanging	404	3 176	62 970	149 622	144 891	114 940	30 698	4 731	2 200	5	4
1731	Electrical work	359	5 682	172 518	460 813	449 585	302 124	151 183	11 227	4 748	2	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	241	2 284	55 288	131 283	127 798	92 224	36 574	3 485	2 136	6	4
1742	Plastering, drywall, and insulation work	139	2 534	70 529	174 257	163 307	109 035	56 628	10 950	679	3	3
1743	Terrazzo, tile, marble, and mosaic work	33	337	8 333	19 657	19 308	11 723	(D)	349	436	21	13
175	Carpentry and floor work:											
1751	Carpentry	344	2 502	55 688	138 503	127 611	80 579	50 784	10 892	1 176	5	5
1752	Floor laying and other floorwork	51	770	19 856	62 891	59 723	36 151	27 587	*3 168	435	5	8
1761	Roofing, siding, and sheet metal work	314	3 540	76 952	243 160	224 316	140 962	86 546	18 844	3 173	4	3
1771	Concrete work	277	3 527	81 791	257 066	243 197	149 141	98 792	13 869	5 880	4	3
1781	Water well drilling	21	138	2 446	8 600	(D)	4 270	4 194	(D)	946	17	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	33	768	19 333	54 684	53 105	37 628	15 968	1 579	600	2	4
1793	Glass and glazing work	29	322	9 876	26 968	26 666	15 044	12 386	302	(D)	1	2
1794	Excavation work	125	945	21 493	78 701	72 024	54 019	18 597	6 677	5 832	10	6
1795	Wrecking and demolition work	19	94	2 303	11 814	(D)	8 062	1 108	(D)	(D)	11	(D)
1796	Installing building equipment, n.e.c. ..	46	544	15 536	41 893	40 767	28 675	13 150	1 125	*542	12	8
1799	Special trade contractors, n.e.c.	228	2 241	43 921	143 258	133 278	98 323	43 570	9 980	4 010	7	12
6552	Land subdividers and developers, n.e.c.	79	322	4 701	20 392	15 656	13 568	5 656	4 736	1 311	12	22

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Indiana

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SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Indiana. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 42,346 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$10.4 billion in total value of business done.

Most of the 42,346 construction establishments were small. Of the total, 31,373 were nonemployers, and over half of the employer establishments had less than 5 employees. The 4,657 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 77 percent of the total value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$9.1 billion on total dollar value of business done. Of this amount, \$8.8 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.9 billion, leaving net value of construction work of \$6.9 billion. In addition, these establishments paid out \$3.2 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$4.2 billion. (See Introduction and appendixes for explanation of terms.)

There were 10,973 establishments with total employment averaging 98,408 during the year. Total payroll for 1987 was \$2.2 billion. Total hours worked by construction workers during the year were 135 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 31,373 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$1.3 billion. Most of these establishments, about 74 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**
(Percent)

1987
1982

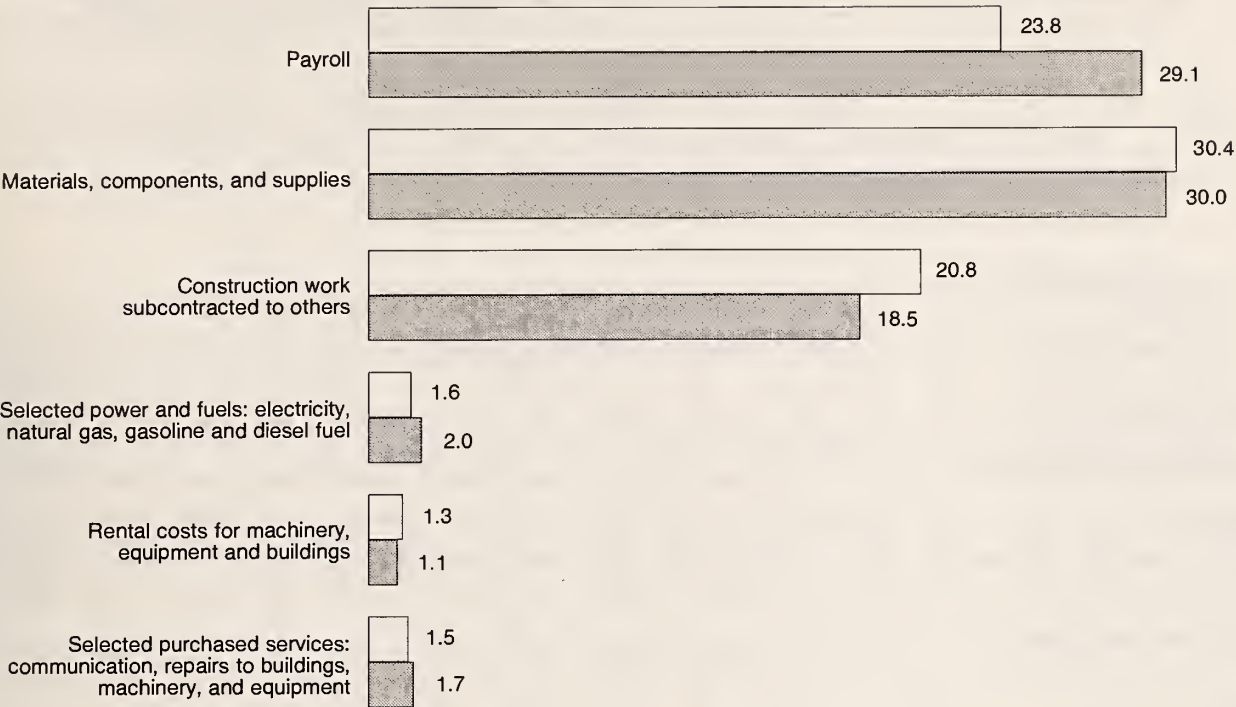


Figure 2. **Value of Construction Work by Type of Construction**
(Percent)

1987
1982



Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done		Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1987													
	Construction industries and land subdividers and developers -----	42 346	33 748	98 408	10 373 798	31 373	30 604	1 257 428	10 973	3 144	98 408	9 116 370	1	1
15, 16, 17	Construction industries -----	41 562	33 197	97 976	10 173 475	30 689	30 068	1 125 719	10 873	3 129	97 976	9 047 756	1	1
15	Building construction—General contractors and operative builders ----	10 448	7 645	25 719	4 075 483	7 253	6 783	516 404	3 195	862	25 719	3 559 079	2	2
16	Heavy construction other than building construction— contractors-----	1 154	514	16 105	1 646 279	351	336	20 934	803	178	16 105	1 625 345	2	1
17	Special trade contractors -----	29 960	25 038	56 152	4 451 712	23 085	22 949	588 380	6 875	2 089	56 152	3 863 332	1	1
1711	Plumbing, heating, and air-conditioning --	3 408	2 318	14 755	1 294 453	1 895	1 848	72 860	1 513	470	14 755	1 221 593	2	1
1731	Electrical work-----	2 372	1 620	9 571	684 933	1 484	1 447	38 312	888	173	9 571	646 621	2	2
6552	Land subdividers and developers, n.e.c.²-----	770	544	416	200 311	684	536	131 709	86	8	416	68 602	17	25
	1982													
	Construction industries and land subdividers and developers -----	34 232	28 119	77 804	5 655 048	24 584	24 424	617 722	9 648	3 695	77 804	5 037 326	1	1
15, 16, 17	Construction industries -----	33 831	27 846	77 563	5 612 993	24 245	24 160	592 197	9 586	3 686	77 563	5 020 796	1	1
15	Building construction—General contractors and operative builders ----	6 851	4 972	21 380	1 963 548	4 104	3 965	180 290	2 747	1 007	21 380	1 783 258	2	1
16	Heavy construction other than building construction— contractors-----	1 797	1 333	12 618	932 317	1 218	1 223	37 408	579	110	12 618	894 909	1	1
17	Special trade contractors -----	25 183	21 541	43 565	2 717 128	18 923	18 972	374 499	6 260	2 569	43 565	2 342 629	1	1
1711	Plumbing, heating, and air-conditioning --	2 959	2 038	11 663	793 128	1 625	1 610	44 975	1 334	428	11 663	748 153	2	1
1731	Electrical work-----	2 148	1 617	7 596	496 364	1 395	1 378	31 392	753	239	7 596	464 972	2	1
6552	Land subdividers and developers, n.e.c.²-----	392	269	234	42 047	339	264	25 525	53	5	234	16 522	14	9

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

¹For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

²For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll ¹			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done ²		
	A	B	C	D	E	F	G	H	I	J	K	J	K
1987													
The State -----	42 346	33 748	98 408	10 373 798	31 373	30 604	1 257 428	10 973	3 144	98 408	9 116 370	1	1
\$10,000,000 or more -----	123	4	20 403	2 854 862	-	-	-	123	4	20 403	2 854 862	(W)	1
\$5,000,000 to \$9,999,999 -----	181	2	9 850	1 225 686	6	-	35 611	175	2	9 850	1 190 075	1	5
\$2,500,000 to \$4,999,999 -----	383	28	11 666	1 332 732	12	10	42 235	371	18	11 666	1 290 497	1	4
\$1,000,000 to \$2,499,999 -----	1 123	95	17 779	1 746 517	79	55	115 046	1 044	40	17 779	1 631 471	2	4
\$500,000 to \$999,999 -----	1 457	342	12 470	1 014 706	209	145	146 025	1 248	197	12 470	868 681	4	4
 \$250,000 to \$499,999 -----	 2 253	 930	 10 807	 782 358	 489	 394	 167 183	 1 764	 536	 10 807	 615 175	 5	 5
\$100,000 to \$249,999 -----	4 668	2 761	10 188	738 245	1 662	1 558	249 652	3 006	1 203	10 188	488 593	4	4
\$50,000 to \$99,999 -----	4 608	3 345	3 663	330 748	2 763	2 659	194 928	1 845	686	3 663	135 820	6	5
\$25,000 to \$49,999 -----	(S)	(S)	(S)	(S)	3 907	3 820	138 527	(S)	(S)	(S)	(S)	(S)	(S)
 Less than \$25,000 -----	 (S)	 (S)	 (S)	 (S)	 22 246	 21 963	 168 221	 (S)	 (S)	 (S)	 (S)	 (S)	 (S)
\$10,000 to \$24,999 -----	(NA)	(NA)	(NA)	(NA)	6 805	6 703	110 242	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 -----	(NA)	(NA)	(NA)	(NA)	4 890	4 829	35 500	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 -----	(NA)	(NA)	(NA)	(NA)	3 974	3 935	14 386	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 -----	(NA)	(NA)	(NA)	(NA)	6 577	6 496	8 093	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1982													
The State -----	34 232	28 119	77 804	5 655 048	24 584	24 424	617 722	9 648	3 695	77 804	5 037 326	1	1
\$10,000,000 or more -----	60	2	16 666	1 486 703	-	-	-	60	2	16 666	1 486 703	(W)	(W)
\$5,000,000 to \$9,999,999 -----	85	2	6 220	(D)	1	-	(D)	84	2	6 220	576 772	(W)	(W)
\$2,500,000 to \$4,999,999 -----	203	3	8 041	1 297 509	7	-	31 146	196	-	8 041	689 591	(W)	(W)
\$1,000,000 to \$2,499,999 -----	524	26	11 755	813 270	19	14	28 398	505	12	11 755	784 872	1	3
\$500,000 to \$999,999 -----	744	105	8 884	519 208	43	35	29 119	701	70	8 884	490 089	4	4
 \$250,000 to \$499,999 -----	 1 355	 398	 8 704	 473 305	 169	 146	 58 377	 1 186	 252	 8 704	 414 928	 5	 5
\$100,000 to \$249,999 -----	3 309	1 758	9 772	518 362	799	779	118 338	2 510	979	9 772	400 024	3	4
\$50,000 to \$99,999 -----	3 583	2 733	4 277	251 579	1 687	1 714	115 257	1 896	1 019	4 277	136 322	5	4
\$25,000 to \$49,999 -----	4 111	3 641	1 832	145 047	2 967	2 980	103 044	1 144	661	1 832	42 003	5	6
 Less than \$25,000 -----	 20 256	 19 450	 1 652	 150 063	 18 892	 18 756	 134 043	 1 364	 694	 1 652	 16 020	 6	 6
\$10,000 to \$24,999 -----	(NA)	(NA)	(NA)	(NA)	5 567	5 517	86 034	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 -----	(NA)	(NA)	(NA)	(NA)	4 402	4 379	29 857	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 -----	(NA)	(NA)	(NA)	(NA)	4 963	4 940	14 192	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 -----	(NA)	(NA)	(NA)	(NA)	3 960	3 920	3 960	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

¹For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

²For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	Construction industries and land subdividers and developers -----	10 973	98 408	78 492	2 169 441	1 608 886	134 808	8 799 822	6 906 193
15, 16, 17	Construction Industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses-----	1 924	8 234	6 410	127 317	89 509	10 399	713 896	537 921
1522	Other residential buildings-----	164	1 574	1 207	31 892	21 591	1 881	210 382	118 296
1531	Operative builders-----	338	2 320	1 305	49 194	21 824	(D)	585 018	366 003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	218	4 554	3 717	119 811	91 491	6 124	577 711	356 329
1542	Nonresidential buildings, n.e.c.-----	551	9 037	7 014	218 480	154 363	12 186	1 300 643	635 701
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction-----	234	4 973	4 156	126 333	100 585	8 046	569 333	502 575
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	47	1 850	1 559	44 399	32 445	2 873	241 116	182 202
1623	Water, sewer, and utility lines-----	206	5 410	4 545	134 066	95 101	7 871	356 448	326 557
1629	Heavy construction, n.e.c.-----	316	3 872	3 184	98 290	78 727	5 452	418 590	335 108
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning-----	1 513	14 755	11 108	357 899	259 396	20 202	1 201 123	1 074 349
1721	Painting and paper hanging-----	583	3 165	2 702	54 926	46 871	4 336	137 922	132 064
1731	Electrical work-----	888	9 571	7 658	240 549	185 813	14 335	637 738	618 690
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	473	3 083	2 680	57 178	47 868	4 222	174 933	165 610
1742	Plastering, drywall, and insulation work-----	275	3 272	2 754	76 752	63 497	5 239	211 377	192 422
1743	Terrazzo, tile, marble, and mosaic work-----	30	329	269	7 493	6 142	428	21 458	21 108
175	Carpentry and floor work:								
1751	Carpentry-----	760	3 262	2 727	45 419	36 033	4 375	165 516	144 649
1752	Floor laying and other floor work-----	187	916	695	16 373	10 620	1 220	72 125	66 852
1761	Roofing, siding, and sheet metal work-----	510	5 072	4 086	104 246	74 248	6 238	342 620	323 030
1771	Concrete work-----	503	3 715	3 201	62 687	49 785	4 881	233 190	221 935
1781	Water well drilling-----	98	487	369	8 251	6 186	618	31 527	31 225
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	62	1 339	1 164	30 834	24 059	1 624	67 459	64 417
1793	Glass and glazing work-----	88	652	471	15 239	10 309	895	55 749	54 429
1794	Excavation work-----	395	2 110	1 737	40 581	32 827	3 155	152 092	142 601
1795	Wrecking and demolition work-----	7	45	39	581	498	(D)	1 679	1 606
1796	Installing building equipment, n.e.c.-----	74	1 519	1 238	48 050	33 149	2 189	113 985	107 417
1799	Special trade contractors, n.e.c.-----	429	2 860	2 301	46 201	33 913	3 405	161 240	149 300
6552	Land subdividers and developers, n.e.c.-----	86	416	180	6 390	2 024	244	44 940	33 785

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
4 205 974	2 918 983	1 893 628	118 318	186 895	1 247 635	77 804	4 884 399	2 470 522	1	1	3	15, 16, 17
												15
301 004 57 419	270 998 62 606	175 975 92 086	4 726 910	11 510 1 305	62 562 8 427	6 233 1 114	325 939 107 702	134 411 36 910	4 8	5 13	15 31	152 1521 1522
157 470	215 484	219 014	1 065	5 292	50 970	1 246	131 638	32 954	8	14	17	1531
197 201 394 492	170 315 283 830	221 382 664 942	4 906 11 375	5 783 14 214	52 230 103 308	6 098 6 689	453 907 708 621	153 901 226 352	3 2	3 2	7 17	154 1541 1542
												16
286 203	239 283	66 757	22 228	29 903	224 641	3 512	294 168	133 845	3	2	5	1611
108 457 224 446 212 266	74 187 113 433 128 025	58 914 29 890 83 482	2 848 10 423 13 888	5 572 16 228 14 028	52 136 98 080 86 092	806 2 958 5 342	55 218 175 035 347 947	26 564 106 651 260 650	2 2 4	2 3 3	3 9 13	162 1622 1623 1629
												17
632 928	461 891	126 773	12 686	21 486	122 355	11 663	727 302	381 742	2	1	6	1711
103 109	30 371	5 858	1 877	3 099	18 428	2 590	89 721	67 378	5	4	16	1721
402 616	224 956	19 047	6 704	9 192	53 660	7 596	454 062	279 690	2	2	9	1731
121 124 115 873 12 942	46 306 80 020 8 242	9 323 18 955 350	1 556 1 908 68	3 710 2 248 213	19 714 17 078 1 537	2 118 2 873 259	67 826 129 748 12 265	44 846 83 792 7 295	5 4 7	6 3 8	19 11 18	174 1741 1742 1743
90 457 35 044	58 324 35 732	20 866 5 273	1 065 630	3 382 882	14 141 7 559	2 107 536	68 329 29 588	35 151 16 305	8 13	9 10	26 18	175 1751 1752
194 843	131 937	19 589	3 691	4 460	39 052	4 404	227 348	137 655	4	3	14	1761
131 763	93 882	11 255	3 353	9 294	54 331	2 077	90 937	47 688	5	5	7	1771
17 858	13 635	302	114	823	14 498	318	18 766	11 092	17	8	14	1781
52 213 27 683 110 810 1 409 87 640 100 864	13 603 31 157 40 123 249 27 888 55 808	3 042 1 320 9 491 73 6 568 11 940	1 750 866 5 114 *47 1 794 2 646	1 401 724 14 208 *20 1 317 2 387	11 524 3 478 82 773 340 17 785 15 591	964 481 2 884 87 853 1 755	50 449 27 837 155 921 3 081 47 190 74 931	37 503 15 243 107 702 2 784 36 242 40 755	9 13 7 (W) 3 8	5 9 6 (W) 3 3	10 26 13 57 9 13	179 1791 1793 1794 1795 1796 1799
*27 829	6 690	11 154	69	*4 202	15 331	234	8 917	5 413	17	34	65	6552

Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year	10 973	9 648	11 251	10 078	1	2	2	3
Proprietors and working partners.....	3 144	3 695	6 868	6 921	4	4	4	4
All employees**	98 408	77 804	99 225	90 886	1	1	1	2
Construction workers:								
March.....	68 445	54 059	70 877	62 934	1	1	1	2
May	79 176	63 951	86 086	75 437	1	1	1	2
August	86 628	69 551	92 898	86 259	1	1	1	2
November	79 717	62 479	85 152	76 487	1	1	1	2
Average	78 492	63 456	83 818	76 435	1	1	1	2
Other employees:								
March.....	19 371	14 287	14 861	13 867	1	1	4	2
May	20 033	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
August	20 182	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
November	20 086	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Average	19 918	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March	28 189	21 011	(NA)	(NA)	1	1	(NA)	(NA)
April to June	34 009	25 098	(NA)	(NA)	1	1	(NA)	(NA)
July to September	38 002	28 101	(NA)	(NA)	1	1	(NA)	(NA)
October to December	34 607	24 767	(NA)	(NA)	1	1	(NA)	(NA)
Total hours worked	134 808	98 978	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	2 169 441	1 467 103	1 327 493	914 401	(W)	1	1	1
Payroll, construction workers	1 608 886	1 159 938	1 083 223	748 152	1	1	1	1
Payroll, other employees	560 554	307 165	244 270	166 249	1	1	3	2
First quarter payroll, all employees	456 826	314 388	262 280	(NA)	1	1	1	(NA)
Employer costs for fringe benefits, all employees	465 002	257 994	232 246	(NA)	1	1	1	(NA)
Legally required expenditures	292 911	189 426	124 440	(NA)	1	1	1	(NA)
Voluntary expenditures	172 090	68 568	107 806	(NA)	1	1	(W)	(NA)
Dollar value of business done	9 116 370	5 037 326	4 904 613	3 220 265	1	1	1	2
Value of construction work ¹	8 799 822	4 884 399	4 688 990	3 116 471	1	1	1	2
Value of construction work subcontracted in from others	1 927 804	957 344	892 496	483 418	2	1	1	2
Land receipts ²	97 783	22 231	(NA)	(NA)	9	6	(NA)	(NA)
Other business receipts	218 764	130 695	215 623	103 794	4	2	2	7
Net value of construction†	6 906 193	3 953 085	3 670 425	2 428 527	1	1	1	2
Value added††	4 205 974	2 470 522	2 157 956	1 477 544	1	1	1	1
Selected costs	4 812 612	2 544 571	2 658 742	1 700 430	1	1	1	2
Materials, components, and supplies ³	2 774 334	1 512 045	1 559 778	1 012 486	1	1	1	2
Construction work subcontracted to others	1 893 628	931 313	1 018 566	687 944	2	1	1	2
Selected power, fuels, and lubricants	144 649	101 211	80 399	(NA)	1	2	1	(NA)
Electricity	22 217	14 880	10 075	(NA)	2	3	3	(NA)
Natural gas	7 852	7 560	5 688	(NA)	2	3	5	(NA)
Gasoline and diesel fuel	105 898	72 224	55 305	(NA)	1	2	1	(NA)
On highway use	73 874	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Off highway use	32 024	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Other, including lubricating oils and greases	8 681	6 546	9 333	(NA)	2	3	3	(NA)
Rental cost for machinery, equipment, and buildings	118 318	55 992	54 706	(NA)	2	2	1	(NA)
For machinery and equipment	85 612	39 770	45 930	26 822	3	2	1	2
For buildings	32 706	16 222	8 776	(NA)	3	3	2	(NA)
Selected purchased services	140 482	84 896	84 338	(NA)	2	2	5	(NA)
Communication services	37 542	24 240	21 459	(NA)	2	2	6	(NA)
Repairs to buildings and other structures	9 236	6 636	5 361	(NA)	7	3	4	(NA)
Repairs to machinery and equipment	93 703	54 019	57 517	(NA)	2	2	7	(NA)
Ownership of construction projects:								
Value of construction work	8 799 822	4 884 399	4 688 990	3 116 471	1	1	1	2
Government owned	1 762 818	1 009 722	822 754	997 271	2	2	1	2
Federal	411 529	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
State and local	1 351 288	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Privately owned	7 037 003	3 874 676	3 866 236	2 119 200	2	1	1	2

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

²Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

³For 1972, includes data for power, fuels, and lubricants.

Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 121 441	1 010 689	2	2
Capital expenditures, other than land -----	186 895	84 032	3	2
New -----	147 758	61 869	4	2
Used -----	39 137	22 163	5	4
Retirements and disposition of depreciable assets -----	60 701	39 876	3	14
End-of-year gross book value of depreciable assets -----	1 247 635	1 054 845	2	2
Depreciation charges during year -----	147 782	114 660	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	224 193	196 477	5	2
Capital expenditures, other than land -----	30 411	17 952	11	4
New buildings and other structures -----	22 766	14 807	14	3
Used buildings and other structures -----	7 644	3 144	14	10
Retirements and disposition of depreciable assets -----	13 084	4 028	9	11
End-of-year gross book value of depreciable assets -----	241 519	210 401	5	2
Depreciation charges during year -----	19 649	16 776	5	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	897 247	814 212	2	2
Capital expenditures, other than land -----	156 484	66 080	3	2
New machinery and equipment, including automobiles and trucks -----	124 991	47 062	3	2
New automobiles and trucks, intended primarily for highway use -----	51 211	21 156	6	4
Used machinery and equipment, including automobiles and trucks -----	31 492	19 018	5	4
Retirements and disposition of depreciable assets -----	47 616	35 848	3	15
End-of-year gross book value of depreciable assets -----	1 006 115	844 444	2	2
Depreciation charges during year -----	128 133	97 883	2	2

Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	10 973	1
Value of construction work	8 799 822	1
Establishments with inventories:		
Number	4 452	3
Value of construction work	4 915 477	2
Inventories ¹ :		
End of 1987, materials and supplies	124 478	4
End of 1986, materials and supplies	114 263	6
Establishments with no inventories:		
Number	4 935	3
Value of construction work	2 773 013	2
Establishments not reporting:		
Number	1 586	6
Value of construction work	1 111 332	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1987											
Number of establishments	10 973	6 315	2 357	1 286	741	187	66	13	6	1	
All employees**	98 408	12 865	14 994	16 992	21 331	12 633	9 945	4 446	5 199	(D)	
Payroll, all employees	2 169 441	178 335	243 602	339 284	504 069	336 850	285 049	143 884	138 367	(D)	
Construction worker hours (thousands)	134 808	16 118	20 583	21 751	29 051	18 945	14 517	6 444	7 396	(D)	
Dollar value business done	9 116 370	1 151 339	1 031 422	1 446 871	2 037 806	1 326 535	1 065 823	606 008	450 564	(D)	
Value of construction work ¹	8 799 822	1 103 285	994 570	1 387 194	1 955 546	1 288 204	1 050 242	1 020 779	(D)	(D)	
Net value of construction work†	6 906 193	874 053	820 562	1 148 271	1 575 358	991 702	814 063	336 366	345 817	(D)	
Value added††	4 205 974	491 582	479 024	694 686	966 325	604 600	502 642	249 975	217 139	(D)	
Cost of materials, components, supplies, and fuels	2 918 983	403 828	366 796	489 235	666 649	414 609	327 002	250 862	(D)	(D)	
Cost of construction work subcontracted to others	1 893 628	229 231	174 008	238 922	380 188	296 502	236 179	338 596	(D)	(D)	
Rental cost for machinery, equipment, and buildings	118 318	8 624	14 306	17 590	26 329	23 870	13 128	9 083	5 386	(D)	
Capital expenditures, other than land	186 895	25 010	26 094	36 368	42 595	26 973	17 393	5 670	6 791	(D)	
End-of-year gross book value of depreciable assets	1 247 635	163 616	174 940	206 714	289 877	199 630	126 029	45 006	41 821	(D)	
1982											
All employees**	77 804	12 345	11 687	11 714	14 782	7 380	7 375	5 929	2 116	4 475	
Value of construction work ¹	4 884 399	551 108	565 433	679 411	1 087 904	568 229	563 804	495 534	102 145	270 830	
Value added††	2 470 522	269 739	293 175	342 045	533 544	297 060	282 993	240 895	34 516	176 553	
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	1	2	4	3	2	1	(W)	(W)	(W)	(D)	
Net value of construction work†	1	6	4	3	1	(W)	(W)	(W)	(W)	(D)	
Capital expenditures, other than land	3	10	12	10	5	2	(W)	(W)	(W)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1987											
Number of establishments	10 973	(S)	(S)	1 845	3 006	1 764	1 248	1 044	371	175	123
All employees**	98 408	(S)	(S)	3 663	10 188	10 807	12 470	17 779	11 666	9 850	20 403
Payroll, all employees	2 169 441	(S)	(S)	36 816	133 391	166 475	227 848	397 940	301 961	280 601	613 197
Construction worker hours (thousands)	134 808	(S)	(S)	4 380	13 280	14 715	15 956	24 562	16 689	14 535	29 173
Dollar value of business done	9 116 370	(S)	(S)	135 820	488 593	615 175	868 681	1 631 471	1 290 497	1 190 075	2 854 862
Value of construction work ¹	8 799 822	(S)	(S)	133 473	477 060	596 442	844 585	1 566 334	1 238 470	1 146 012	2 756 775
Net value of construction work†	6 906 193	(S)	(S)	125 613	441 509	530 397	722 398	1 279 436	987 886	905 400	1 874 598
Value added††	4 205 974	(S)	(S)	76 385	274 617	317 424	426 244	774 263	610 246	548 440	1 153 264
Cost of materials, components, supplies, and fuels	2 918 983	(S)	(S)	51 477	175 794	226 759	313 859	546 917	411 889	388 960	789 021
Cost of construction work subcontracted to others	1 893 628	(S)	(S)	7 860	35 551	66 044	122 186	286 898	250 584	240 612	882 177
Rental cost for machinery, equipment, and buildings	118 318	(S)	(S)	1 448	5 050	9 201	11 838	23 096	14 964	18 277	34 183
Capital expenditures, other than land	186 895	(S)	(S)	3 408	17 925	14 895	23 171	37 491	25 255	26 390	37 538
End-of-year gross book value of depreciable assets	1 247 635	(S)	(S)	27 722	103 618	117 033	126 988	256 682	184 136	139 516	283 783
1982											
All employees**	77 804	1 652	1 832	4 277	9 772	8 704	8 884	11 755	8 041	6 220	16 666
Value of construction work ¹	4 884 399	15 764	41 647	133 565	390 153	399 284	476 907	765 812	660 413	552 485	1 448 366
Value added††	2 470 522	7 365	23 445	72 212	204 907	212 192	255 115	395 256	334 626	269 943	695 459
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	1	(S)	(S)	6	4	5	4	2	1	1	(W)
Net value of construction work†	1	(S)	(S)	5	4	5	4	3	3	5	1
Capital expenditures, other than land	3	(S)	(S)	16	11	12	11	9	6	11	1

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work ¹				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction ²	Maintenance and repair				
	A	B	C	D	A	B	C	D
1987								
Value of construction work ¹	8 799 822	5 250 943	2 068 791	1 075 401	1	2	1	2
Building construction	6 366 926	4 139 413	1 500 303	710 195	1	2	2	2
Single-family houses	1 868 022	1 321 956	343 149	202 917	3	4	5	5
Single-family houses, detached	1 615 827	1 113 705	319 296	182 825	3	4	6	5
Single-family houses, attached	252 195	208 251	23 852	20 091	11	13	23	12
Apartment buildings with two or more apartments	318 138	256 507	31 585	30 045	18	22	11	8
Other residential buildings, including hotels and motels	208 186	136 048	55 746	16 391	8	7	24	10
Hotels and motels	97 214	77 523	13 197	6 493	3	3	3	7
Other residential buildings, excluding hotels and motels	110 972	58 524	42 549	9 898	15	15	31	16
Office buildings	763 335	483 929	195 974	83 431	2	2	3	5
Other commercial buildings such as stores, restaurants, and automobile service stations	736 772	474 235	179 225	83 312	3	4	3	6
Industrial buildings and warehouses	1 350 085	825 154	338 819	186 110	1	2	2	3
Industrial buildings	1 130 807	656 658	303 129	171 019	2	2	3	3
Warehouses	219 277	168 496	35 690	15 091	2	2	5	6
Religious buildings	91 919	49 838	26 156	15 924	6	10	5	5
Educational buildings	467 272	268 657	165 041	33 573	2	3	2	3
Hospitals and institutional buildings	330 971	172 272	128 902	29 796	3	6	2	4
Farm buildings	39 575	24 940	6 650	7 984	10	11	18	16
Amusement, social, and recreational buildings	101 187	84 792	5 263	11 132	5	2	18	32
Other nonresidential buildings	74 449	41 085	23 793	9 580	5	5	10	12
Land development for buildings	17 015	(NA)	(NA)	(NA)	20	(NA)	(NA)	(NA)
Nonbuilding construction	2 045 224	1 111 529	568 488	365 206	1	2	1	3
Highways, streets, and related facilities	555 197	258 268	195 270	101 658	2	3	1	4
Parking areas including private driveways	78 611	48 566	15 879	14 166	9	11	8	15
Bridges, tunnels, and elevated highways	268 024	197 937	43 053	27 032	2	2	7	2
Tunnels	38 500	31 682	3 381	3 437	9	11	21	(W)
Bridges and elevated highways	229 523	166 255	39 672	23 595	2	2	7	2
Power and communication transmission lines, towers, and related facilities	98 855	42 857	32 164	23 833	4	7	1	8
Sewers, water mains, and related facilities	265 423	207 390	29 773	28 259	4	4	8	17
Sewers, sewer lines, and related facilities	177 190	141 312	21 300	14 576	7	4	8	16
Water mains and related facilities	88 233	66 078	8 472	13 682	7	8	14	19
Pipeline, other than sewer or water lines	61 159	41 895	11 691	7 572	6	6	22	2
Blast furnaces, petroleum refineries, and chemical complexes	169 018	58 240	49 371	61 406	4	4	4	7
Power plants	165 573	37 238	96 749	31 585	1	2	2	3
Power plants, nuclear	39 265	(D)	12 406	(D)	1	(D)	3	(D)
Power plants, except nuclear	126 308	(D)	84 343	(D)	2	(D)	2	(D)
Sewage treatment and water treatment plants	108 476	60 952	41 232	6 292	4	3	7	29
Sewage treatment plants	92 907	52 498	35 864	*4 544	4	3	6	40
Water treatment plants	15 568	8 453	5 367	1 747	7	1	21	4
Earthmoving, nonbuilding	44 601	31 193	5 862	7 545	7	7	13	16
Other nonbuilding construction	230 287	126 993	47 444	55 858	7	11	2	17
Construction work, n.s.k.	387 671	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
1982								
Value of construction work ¹	4 884 399	3 618 440	(NA)	1 265 958	1	1	(NA)	1
Building construction	3 263 355	2 492 424	(NA)	770 931	1	1	(NA)	1
Single-family houses	721 351	484 800	(NA)	236 551	3	4	(NA)	4
Single-family houses, detached	653 004	428 682	(NA)	224 322	3	4	(NA)	4
Single-family houses, attached	68 346	56 117	(NA)	12 228	7	8	(NA)	8
Apartment buildings with two or more apartments	173 533	145 716	(NA)	27 816	4	5	(NA)	6
Other residential buildings, including hotels and motels	85 338	73 441	(NA)	11 897	2	1	(NA)	5
Office buildings	377 001	308 888	(NA)	68 112	1	1	(NA)	3
Other commercial buildings such as stores, restaurants, and automobile service stations	288 906	220 760	(NA)	68 146	3	3	(NA)	5
Industrial buildings and warehouses	893 973	679 110	(NA)	214 863	1	1	(NA)	2
Industrial buildings	777 485	580 232	(NA)	197 253	1	1	(NA)	2
Warehouses	116 487	98 877	(NA)	17 609	4	5	(NA)	6
Religious buildings	60 910	45 093	(NA)	15 816	5	6	(NA)	6
Educational buildings	274 122	219 541	(NA)	54 581	2	1	(NA)	3
Hospitals and institutional buildings	274 960	237 594	(NA)	37 366	1	1	(NA)	1
Farm buildings	40 805	32 022	(NA)	8 783	8	10	(NA)	11
Other nonresidential buildings	72 456	45 457	(NA)	27 000	9	7	(NA)	26
Nonbuilding construction	1 301 187	875 303	(NA)	425 883	1	1	(NA)	1
Highways, streets, and related facilities	309 697	123 407	(NA)	186 290	1	2	(NA)	2
Parking areas including private driveways	21 993	13 685	(NA)	8 307	9	10	(NA)	9
Bridges, tunnels, and elevated highways	80 697	54 735	(NA)	25 961	4	5	(NA)	5
Conservation and development construction	19 987	15 922	(NA)	4 065	13	14	(NA)	25
Power and communication transmission lines, towers, and related facilities	93 038	80 463	(NA)	12 574	2	1	(NA)	4
Sewers, water mains, and related facilities	149 359	119 131	(NA)	30 228	3	3	(NA)	9
Blast furnaces, petroleum refineries, and chemical complexes	209 808	127 334	(NA)	82 473	1	1	(NA)	1
Power plants	238 195	206 192	(NA)	32 003	(W)	(W)	(NA)	2
Power plants, nuclear	175 579	(D)	(NA)	(D)	(W)	(D)	(NA)	(D)
Power plants, except nuclear	62 616	(D)	(NA)	(D)	1	(D)	(NA)	(D)
Sewage treatment and water treatment plants	67 873	55 065	(NA)	12 807	2	2	(NA)	7
Sewage treatment plants	49 295	40 366	(NA)	8 929	2	2	(NA)	1
Water treatment plants	18 578	14 699	(NA)	3 878	5	1	(NA)	23
Other nonbuilding construction	110 539	79 369	(NA)	31 174	4	5	(NA)	6
Construction work, n.s.k.	319 855	250 712	(NA)	69 143	4	4	(NA)	8

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.
²In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".

Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
		A	B	C	D	E	F	G
	Construction industries and land subdividers and developers -----	10 973	78 492	134 808	68 445	28 189	79 176	34 009
15, 16, 17	Construction industries:							
15	Building construction—General contractors and operative builders:							
152	General contractors, residential buildings:							
1521	Single-family houses -----	1 924	6 410	10 399	5 649	2 202	6 567	2 697
1522	Other residential buildings -----	164	1 207	1 881	1 147	405	1 203	475
1531	Operative builders -----	338	1 305	(D)	1 215	497	1 412	(D)
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	218	3 717	6 124	3 311	1 305	3 410	1 407
1542	Nonresidential buildings, n.e.c. -----	551	7 014	12 186	6 302	2 660	6 945	3 012
16	Heavy construction other than building construction—contractors:							
1611	Highway and street construction -----	234	4 156	8 046	2 297	985	4 584	2 266
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	47	1 559	2 873	1 134	520	1 568	738
1623	Water, sewer, and utility lines -----	206	4 545	7 871	3 866	1 571	4 640	1 970
1629	Heavy construction, n.e.c. -----	316	3 184	5 452	2 618	1 086	3 149	1 352
17	Special trade contractors:							
1711	Plumbing, heating, and air-conditioning ----	1 513	11 108	20 202	10 701	4 743	11 101	5 054
1721	Painting and paper hanging -----	583	2 702	4 336	2 192	866	2 847	1 121
1731	Electrical work -----	888	7 658	14 335	7 437	3 358	7 398	3 536
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	473	2 680	4 222	2 320	828	2 683	1 055
1742	Plastering, drywall, and insulation work --	275	2 754	5 239	2 611	1 166	2 900	1 333
1743	Terrazzo, tile, marble, and mosaic work ..	30	269	428	238	91	278	113
175	Carpentry and floor work:							
1751	Carpentry -----	760	2 727	4 375	2 472	1 001	2 712	1 057
1752	Floor laying and other floor work -----	187	695	1 220	719	299	684	297
1761	Roofing, siding, and sheet metal work -----	510	4 086	6 238	3 399	1 265	4 099	1 506
1771	Concrete work -----	503	3 201	4 881	2 277	840	3 450	1 345
1781	Water well drilling -----	98	369	618	279	139	346	157
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	62	1 164	1 624	1 022	330	1 149	392
1793	Glass and glazing work -----	88	471	895	414	194	439	201
1794	Excavation work -----	395	1 737	3 155	1 473	605	1 763	842
1795	Wrecking and demolition work -----	7	39	(D)	43	*7	38	(D)
1796	Installing building equipment, n.e.c. -----	74	1 238	2 189	1 163	496	1 176	504
1799	Special trade contractors, n.e.c. -----	429	2 301	3 405	2 015	687	2 426	893
6552	Land subdividers and developers, n.e.c. --	86	180	244	122	31	200	70

¹Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
86 628	38 002	79 717	34 607	1	1	1	1	1	1	1	1	1	1	15, 16, 17
														15
7 073 1 327	2 855 532	6 351 1 150	2 644 468	5 8	6 12	5 8	7 10	5 8	6 12	5 8	6 12	5 8	6 14	152 1521 1522
1 419	(D)	1 173	(D)	10	(D)	11	13	11	(D)	10	(D)	10	(D)	1531
														154
4 060 7 495	1 700 3 325	4 087 7 313	1 710 3 187	3 2	4 4	4 3	4 4	3 2	4 4	3 3	4 4	3 3	4 4	1541 1542
														16
5 370	2 774	4 375	2 020	3	5	9	13	3	5	3	5	3	5	1611
														162 1622
1 906 4 988 3 360	894 2 270 1 540	1 627 4 684 3 611	719 2 059 1 472	2 2 4	4 3 4	2 2 4	4 3 5	3 3 4	4 3 4	2 2 4	4 3 5	2 3 5	3 4 5	1623 1629
														17
11 678	5 311	10 952	5 092	2	2	2	2	2	2	2	3	2	3	1711
3 151	1 272	2 619	1 077	5	7	5	8	5	7	5	7	5	7	1721
8 002	3 817	7 795	3 623	2	3	2	3	2	3	3	3	2	3	1731
														174
														1741
2 917 2 823 285	1 182 1 415 116	2 800 2 689 275	1 156 1 324 107	5 4 8	7 6 7	6 4 8	7 6 7	5 4 8	8 6 7	5 4 7	7 7 7	5 4 9	8 7 8	1742 1743
2 964 693	1 162 316	2 760 684	1 154 307	8 14	11 19	8 13	12 18	8 14	11 19	8 14	10 20	9 15	12 21	175 1751 1752
4 625	1 762	4 228	1 703	4	4	4	5	5	5	4	5	4	4	1761
3 886	1 502	3 194	1 193	5	7	6	8	5	8	6	7	5	7	1771
445	165	405	156	13	10	8	8	10	9	18	11	22	13	1781
														179
1 397 519 1 877 57 1 433 2 606	482 259 911 (D) 662 985	1 089 510 1 835 (D) 1 181 2 161	418 240 796 (D) 526 839	9 14 7 (W) 3 8	8 17 9 (D) 5 10	6 16 7 (W) 3 8	5 18 10 41 3 10	8 13 7 (W) 5 8	8 17 9 (D) 3 9	8 15 7 (W) 4 9	12 20 8 (D) 14 12	11 14 8 (W) 3 8	9 16 9 (D) 3 10	1791 1793 1794 1795 1796 1799
261	92	137	51	25	32	23	35	28	34	27	32	24	33	6552

Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	Construction industries and land subdividers and developers -----	9.0	22.0	1 717.5	112.1	.247	.332	.215	.013
15, 16, 17	Construction industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.3	15.5	1 622.3	111.4	.178	.380	.246	.007
1522	Other residential buildings -----	9.6	20.3	1 558.4	174.3	.152	.298	.438	.004
1531	Operative builders -----	6.9	21.2	(D)	448.3	.084	.368	.374	.002
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	20.9	26.3	1 647.6	155.4	.207	.295	.383	.008
1542	Nonresidential buildings, n.e.c. -----	16.4	24.2	1 737.4	185.4	.168	.218	.511	.009
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	21.3	25.4	1 936.0	137.0	.222	.420	.117	.039
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	39.4	24.0	1 842.8	154.7	.184	.308	.244	.012
1623	Water, sewer, and utility lines -----	26.3	24.8	1 731.8	78.4	.376	.318	.084	.029
1629	Heavy construction, n.e.c. -----	12.3	25.4	1 712.3	131.5	.235	.306	.199	.033
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	9.8	24.3	1 818.7	108.1	.298	.385	.106	.011
1721	Painting and paper hanging -----	5.4	17.4	1 604.7	51.0	.398	.220	.042	.014
1731	Electrical work -----	10.8	25.1	1 871.9	83.3	.377	.353	.030	.011
174	Masonry, stoneowrk, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.5	18.5	1 575.4	65.3	.327	.265	.053	.009
1742	Plastering, drywall, and insulation work -----	11.9	23.5	1 902.3	76.8	.363	.379	.090	.009
1743	Terrazzo, tile, marble, and mosaic work -----	11.0	22.8	1 591.1	79.8	.349	.384	.016	.003
175	Carpentry and floor work:								
1751	Carpentry -----	4.3	13.9	1 604.3	60.7	.274	.352	.126	.006
1752	Floor laying and other floor work -----	4.9	17.9	1 755.4	103.8	.227	.495	.073	.009
1761	Roofing, siding, and sheet metal work -----	9.9	20.6	1 526.7	83.9	.304	.385	.057	.011
1771	Concrete work -----	7.4	16.9	1 524.8	72.8	.269	.403	.048	.014
1781	Water well drilling -----	5.0	16.9	1 674.8	85.4	.262	.432	.010	.004
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	21.6	23.0	1 395.2	58.0	.457	.202	.045	.026
1793	Glass and glazing work -----	7.4	23.4	1 900.2	118.4	.273	.559	.024	.016
1794	Excavation work -----	5.3	19.2	1 816.4	87.6	.267	.264	.062	.034
1795	Wrecking and demolition work -----	6.4	12.9	(D)	43.1	.346	.148	.043	.028
1796	Installing building equipment, n.e.c. -----	20.5	31.6	1 768.2	92.1	.422	.245	.058	.016
1799	Special trade contractors, n.e.c. -----	6.7	16.2	1 479.8	70.1	.287	.346	.074	.016
6552	Land subdividers and developers, n.e.c. -----	4.8	15.4	1 355.6	249.7	.142	.149	.248	.002

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO-GARY-LAKE COUNTY, IL-IN-WI CMSA											
	Construction industries and land subdividers and developers	13 969	167 514	4 588 978	18 684 577	13 696 027	8 985 397	5 058 317	4 988 550	258 689	1	1
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 967	9 781	181 330	1 096 506	722 962	422 518	341 854	373 544	13 780	4	5
1522	Other residential buildings	205	2 151	60 285	321 890	129 224	83 046	58 019	192 666	2 097	7	6
1531	Operative builders	439	4 077	131 430	1 638 360	783 288	434 551	373 285	855 072	26 665	4	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	235	3 488	108 470	627 801	253 132	159 361	127 588	374 669	2 925	4	4
1542	Nonresidential buildings, n.e.c.	656	16 426	442 295	3 413 653	1 416 569	1 003 036	445 440	1 997 084	17 805	4	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	204	5 936	192 031	870 027	650 677	431 593	263 317	219 349	25 641	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	30	1 268	35 015	140 784	107 253	58 550	48 964	33 531	5 780	4	3
1623	Water, sewer, and utility lines	258	5 478	163 860	557 522	476 006	313 282	(D)	81 516	16 996	5	3
1629	Heavy construction, n.e.c.	166	4 812	142 579	726 059	570 850	398 739	184 498	155 210	10 321	2	2
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	2 001	23 316	711 432	2 154 379	1 925 413	1 184 055	768 069	228 966	26 328	1	1
1721	Painting and paper hanging	828	7 118	156 699	385 321	364 149	290 078	76 615	21 172	4 396	4	3
1731	Electrical work	1 335	20 070	675 615	1 721 968	1 675 937	1 116 904	572 035	46 032	15 389	1	1
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	672	6 148	148 852	405 511	387 399	272 450	117 125	18 113	6 883	3	3
1742	Plastering, drywall, and insulation work	382	8 025	218 187	543 988	512 942	360 427	165 460	31 046	4 191	2	2
1743	Terrazzo, tile, marble, and mosaic work	110	1 068	30 931	86 657	85 931	53 514	33 190	726	1 291	5	5
175	Carpentry and floor work:											
1751	Carpentry	1 065	9 923	234 348	724 123	656 866	409 811	253 027	67 256	6 105	3	2
1752	Floor laying and other floorwork	243	2 289	57 540	211 030	196 586	114 718	86 285	14 444	1 870	5	4
1761	Roofing, siding, and sheet metal work	808	8 512	195 939	660 745	616 722	387 668	236 033	44 023	8 906	3	2
1771	Concrete work	876	11 180	264 327	999 186	892 839	539 818	359 679	106 346	22 698	2	2
1781	Water well drilling	36	338	8 636	31 865	31 388	18 931	(D)	477	2 769	2	3
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	118	2 217	65 336	189 095	171 136	128 737	51 588	17 959	2 029	3	3
1793	Glass and glazing work	105	1 169	31 609	98 490	94 309	54 759	43 384	4 181	2 344	8	4
1794	Excavation work	294	2 537	74 131	282 428	255 182	201 698	59 607	27 246	20 509	5	4
1795	Wrecking and demolition work	72	715	22 256	73 232	70 599	67 259	4 459	2 633	2 299	5	3
1796	Installing building equipment, n.e.c.	142	3 295	102 999	275 589	254 977	191 197	73 376	20 613	1 441	4	2
1799	Special trade contractors, n.e.c.	526	5 365	114 075	364 414	343 996	237 763	118 777	20 418	5 175	5	4
6552	Land subdividers and developers, n.e.c.	198	813	18 771	83 953	49 696	50 934	10 018	34 258	2 060	8	11
	AURORA-ELGIN, IL PMSA											
	Construction industries and land subdividers and developers	829	7 281	181 762	737 670	579 281	375 721	224 658	158 389	17 714	3	3
	(See appropriate State for SIC detail.)											
	CHICAGO, IL PMSA											
	Construction industries and land subdividers and developers	9 918	128 485	3 598 988	15 065 422	10 779 420	7 080 204	3 958 061	4 286 002	192 799	1	1
	(See appropriate State for SIC detail.)											

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	GARY-HAMMOND, IN PMSA											
	Construction industries and land subdividers and developers	887	11 173	294 825	913 538	754 038	524 658	255 823	159 500	10 514	2	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	131	584	10 634	56 367	42 155	21 515	21 687	14 212	510	14	17
1522	Other residential buildings	10	52	1 391	9 821	6 699	2 625	(D)	3 122	(D)	19	13
1531	Operative builders	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	12	264	(D)	(D)	(D)	11 147	5 697	(D)	*147	8	(D)
1542	Nonresidential buildings, n.e.c.	22	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	14	(D)	(D)	(D)	(D)	20 375	(D)	2 706	1 203	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	21	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1629	Heavy construction, n.e.c.	31	1 407	46 591	163 413	109 154	75 734	(D)	54 259	1 094	3	2
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	134	1 975	62 897	150 925	137 597	103 129	37 614	13 328	2 585	3	4
1721	Painting and paper hanging	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1731	Electrical work	71	1 234	39 114	96 331	(D)	66 872	(D)	(D)	(D)	3	(D)
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1742	Plastering, drywall, and insulation work	22	183	4 550	12 167	(D)	6 469	(D)	(D)	96	12	(D)
1743	Terrazzo, tile, marble, and mosaic work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floorwork	23	138	2 003	8 354	7 613	4 432	*4 196	*741	*52	28	36
1761	Roofing, siding, and sheet metal work	58	522	12 910	45 849	39 683	20 517	(D)	6 166	*538	10	12
1771	Concrete work	51	592	9 006	34 154	33 719	19 354	(D)	435	633	9	7
1781	Water well drilling	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	8	259	6 307	15 083	14 217	12 131	(D)	866	(D)	(W)	(W)
1793	Glass and glazing work	6	73	2 021	6 196	(D)	3 573	3 387	(D)	(D)	(W)	(D)
1794	Excavation work	35	123	2 268	7 610	6 993	6 420	1 845	*617	240	17	16
1795	Wrecking and demolition work	-	-	-	-	-	-	-	-	-	-	-
1796	Installing building equipment, n.e.c.	3	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(S)	(S)
1799	Special trade contractors, n.e.c.	*26	260	3 679	11 482	10 908	7 411	3 903	*574	229	38	35
6552	Land subdividers and developers, n.e.c.	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	JOLIET, IL PMSA											
	Construction industries and land subdividers and developers	878	8 171	219 418	745 524	621 815	403 190	230 669	123 709	13 010	2	2
	(See appropriate State for SIC detail.)											
	KENOSHA, WI PMSA											
	Construction industries and land subdividers and developers	212	1 792	42 656	142 091	115 591	74 906	46 737	26 500	3 126	6	6
	(See appropriate State for SIC detail.)											
	LAKE COUNTY, IL PMSA											
	Construction industries and land subdividers and developers	1 245	10 612	251 329	1 080 332	845 882	526 718	342 369	234 450	21 526	2	2
	(See appropriate State for SIC detail.)											

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CINCINNATI-HAMILTON, OH-KY- IN CMSA											
	Construction industries and land subdividers and developers	3 752	36 829	791 884	3 628 799	2 554 973	1 542 067	1 088 896	1 073 826	58 041	1	1
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	516	2 452	38 502	266 254	187 782	94 866	102 028	78 473	3 324	7	11
1522	Other residential buildings	73	377	6 628	36 418	21 528	11 027	13 378	14 890	*516	19	15
1531	Operative builders	168	1 630	40 069	491 133	239 320	109 864	145 860	251 813	9 263	11	9
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	95	1 224	31 380	233 041	98 818	58 461	48 473	134 222	2 374	7	8
1542	Nonresidential buildings, n.e.c.	227	3 675	81 186	662 884	248 693	153 773	99 550	414 191	2 790	5	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	70	1 698	47 396	233 754	182 597	103 352	86 463	51 157	7 190	3	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	31	597	13 751	59 735	52 300	30 017	22 673	7 434	2 953	3	6
1629	Heavy construction, n.e.c.	52	1 043	28 486	90 915	81 897	56 185	26 078	9 018	2 088	5	5
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	514	4 660	111 391	370 344	333 469	192 868	143 390	36 874	6 395	3	2
1721	Painting and paper hanging	243	1 379	22 404	59 400	57 490	47 824	(D)	1 910	549	7	11
1731	Electrical work	320	2 979	67 427	195 503	191 374	113 507	81 064	4 130	2 160	3	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	190	1 611	26 892	75 298	72 964	49 651	23 323	2 335	1 763	8	6
1742	Plastering, drywall, and insulation work	137	1 862	40 387	108 216	99 942	59 651	41 984	8 274	1 908	10	6
1743	Terrazzo, tile, marble, and mosaic work	35	131	3 166	11 687	11 295	5 905	5 692	392	95	12	10
175	Carpentry and floor work:											
1751	Carpentry	253	1 447	21 253	63 421	57 155	35 190	26 532	6 266	487	11	8
1752	Floor laying and other floorwork	54	493	10 560	38 357	37 714	22 752	16 444	643	655	11	6
1761	Roofing, siding, and sheet metal work	181	1 721	30 311	107 516	101 842	61 243	42 209	5 675	908	5	4
1771	Concrete work	183	3 252	71 392	221 175	198 721	123 033	77 740	22 454	4 215	3	2
1781	Water well drilling	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	23	509	10 508	28 505	26 562	21 062	(D)	1 943	366	4	3
1793	Glass and glazing work	40	268	5 251	18 666	18 537	10 064	8 712	129	308	15	14
1794	Excavation work	116	890	16 670	61 741	59 481	50 986	10 697	2 259	4 496	9	8
1795	Wrecking and demolition work	9	(D)	(D)	(D)	18 564	(D)	1 556	(D)	(D)	(D)	(W)
1796	Installing building equipment, n.e.c.	37	1 073	36 365	82 002	76 894	57 547	20 828	5 108	507	2	3
1799	Special trade contractors, n.e.c.	142	1 261	22 072	70 664	67 440	48 364	21 293	3 224	1 882	11	10
6552	Land subdividers and developers, n.e.c.	38	94	1 797	10 642	4 663	3 090	*1 747	5 979	*55	37	38
	CINCINNATI, OH-KY-IN PMSA											
	Construction industries and land subdividers and developers	3 141	30 460	652 671	3 080 465	2 119 991	1 268 913	910 966	960 474	48 608	1	1
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	417	2 054	33 083	218 713	158 841	80 810	85 370	59 873	2 677	8	12
1522	Other residential buildings	64	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders	136	1 295	33 496	406 837	189 067	78 829	120 087	217 771	8 939	8	9
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	84	1 035	26 653	(D)	88 855	52 377	(D)	(D)	(D)	7	9
1542	Nonresidential buildings, n.e.c.	197	3 359	74 867	626 942	229 698	142 841	90 783	397 245	2 348	5	4

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17 16	CINCINNATI, OH-KY-IN PMSA— Con.											
	Construction industries and land subdividers and developers—Con.											
	Construction Industries—Con.											
	Heavy construction other than building construction—contractors:											
	1611 Highway and street construction	56	1 231	34 800	187 970	143 096	78 391	(D)	44 874	5 381	5	4
	162 Heavy construction, except highway: 1622 Bridge, tunnel, and elevated											
	highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1623 Water, sewer, and utility lines	27	528	12 089	(D)	46 365	26 349	(D)	(D)	(D)	4	7
	1629 Heavy construction, n.e.c.	45	736	20 097	71 714	63 446	43 305	(D)	8 268	(D)	6	6
	17 Special trade contractors:											
	1711 Plumbing, heating, and air- conditioning	438	4 280	102 857	340 828	305 707	177 902	(D)	35 120	6 112	3	2
	1721 Painting and paper hanging	208	1 152	18 794	51 551	49 730	41 149	(D)	1 821	378	9	13
	1731 Electrical work	254	2 551	58 272	163 403	160 103	95 801	(D)	3 300	1 855	3	3
	174 Masonry, stonework, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stonework	159	1 307	20 760	54 782	52 582	35 676	16 917	2 200	(D)	10	6
	1742 Plastering, drywall, and insulation work	119	1 649	36 497	97 140	89 955	53 992	(D)	7 185	1 815	11	7
	1743 Terrazzo, tile, marble, and mosaic work	28	122	3 063	11 238	(D)	5 621	5 530	(D)	(D)	13	(D)
175 1751 1752	Carpentry and floor work:											
	1751 Carpentry	228	1 319	19 397	58 795	52 914	32 790	24 157	5 881	362	12	9
	1752 Floor laying and other floorwork	38	407	9 496	34 993	34 466	20 492	15 456	527	439	10	6
	1761 Roofing, siding, and sheet metal work	151	1 500	26 908	93 662	88 977	53 808	36 576	4 686	820	4	4
	1771 Concrete work	160	1 561	29 394	101 086	(D)	52 769	(D)	(D)	2 038	6	(D)
	1781 Water well drilling	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection	18	307	4 864	13 225	11 899	9 492	(D)	1 326	(D)	8	7
	1793 Glass and glazing work	37	248	4 861	16 912	(D)	9 103	7 927	(D)	(D)	16	(D)
	1794 Excavation work	78	711	13 780	52 981	50 835	44 148	8 863	2 126	4 134	9	9
	1795 Wrecking and demolition work	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1796 Installing building equipment, n.e.c.	34	(D)	35 909	80 526	(D)	56 552	20 553	(D)	(D)	(D)	(D)
	1799 Special trade contractors, n.e.c.	123	1 190	21 181	67 983	64 792	46 344	(D)	3 191	(D)	11	10
	6552 Land subdividers and developers, n.e.c.	*32	*77	1 461	*7 732	*3 302	*2 029	(D)	4 430	*55	46	56
15,16, 17	HAMILTON-MIDDLETOWN, OH PMSA											
	Construction industries and land subdividers and developers	611	6 369	139 213	548 334	434 982	273 155	177 929	113 353	9 433	3	3
	(See appropriate State for SIC detail.)											
	INDIANAPOLIS, IN MSA											
	Construction industries and land subdividers and developers	2 697	30 065	672 954	3 058 205	2 240 022	1 322 426	973 837	818 183	54 829	1	2
	Construction Industries:											
	Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses	375	1 715	29 688	185 092	123 197	69 986	60 959	61 895	2 026	9	12
	1522 Other residential buildings	43	928	19 098	123 649	67 199	30 631	36 874	56 450	974	6	17
	1531 Operative builders	123	896	20 959	324 197	207 412	83 163	126 138	116 785	2 920	10	21
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses	37	1 105	26 470	146 135	79 836	47 812	34 063	66 299	895	9	6
	1542 Nonresidential buildings, n.e.c.	127	2 989	75 970	600 313	229 276	135 936	113 200	371 037	5 888	3	4

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
											B	E
	INDIANAPOLIS, IN MSA—Con.											
	Construction industries and land subdividers and developers—Con.											
15,16, 17 16	Construction industries—Con.											
	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	53	1 226	27 827	126 813	117 385	59 779	61 221	9 428	6 604	8	4
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	12	190	5 351	16 448	13 471	7 846	(D)	2 977	438	15	15
1623	Water, sewer, and utility lines -----	67	895	20 056	66 583	59 665	40 153	19 871	6 918	4 485	10	5
1629	Heavy construction, n.e.c. -----	49	543	14 850	53 403	46 722	29 549	17 284	6 681	2 325	10	10
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	357	4 708	122 753	419 329	365 575	215 864	154 388	53 754	7 280	2	2
1721	Painting and paper hanging-----	179	1 283	22 488	55 373	52 805	41 172	12 364	2 568	1 238	7	6
1731	Electrical work -----	212	3 352	83 020	233 092	226 895	148 948	78 743	6 197	2 744	4	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	129	1 005	17 090	48 694	46 013	31 747	14 284	2 680	1 050	11	10
1742	Plastering, drywall, and insulation work -----	89	1 592	39 530	109 670	100 341	53 664	46 959	9 330	579	3	3
1743	Terrazzo, tile, marble, and mosaic work -----	6	167	4 280	11 653	(D)	(D)	4 599	(D)	(D)	(W)	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	204	1 108	15 358	63 849	54 154	35 777	20 647	9 695	*887	16	18
1752	Floor laying and other floorwork-----	48	365	7 726	38 399	34 554	16 786	(D)	3 845	548	20	11
1761	Roofing, siding, and sheet metal work -----	104	1 680	35 783	126 434	119 543	74 848	(D)	6 891	1 018	7	4
1771	Concrete work -----	118	1 221	21 585	69 554	65 700	39 543	26 985	3 854	1 857	7	5
1781	Water well drilling -----	9	(D)	(D)	(D)	5 086	2 485	2 638	(D)	(D)	(D)	29
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	25	366	6 565	16 310	15 842	12 974	3 038	*468	92	28	18
1793	Glass and glazing work -----	42	360	8 623	32 182	31 140	14 402	18 137	1 042	324	19	14
1794	Excavation work -----	90	525	11 856	44 907	43 078	32 557	11 394	1 829	4 466	11	11
1795	Wrecking and demolition work -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	30	445	11 851	34 104	(D)	23 389	8 910	(D)	687	8	(D)
1799	Special trade contractors, n.e.c. -----	127	991	18 177	68 786	63 240	41 028	25 444	5 547	1 210	10	8
6552	Land subdividers and developers, n.e.c. -----	40	307	4 321	36 933	*27 653	*24 455	3 729	9 281	*4 035	20	42
	LOUISVILLE, KY-IN MSA											
	Construction industries and land subdividers and developers-----	2 027	21 347	406 218	1 709 570	1 325 233	767 572	599 246	384 337	29 114	2	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	254	918	14 589	86 981	66 183	29 888	38 494	20 798	648	10	17
1522	Other residential buildings -----	31	604	11 953	73 523	37 318	22 332	15 033	36 205	*793	10	14
1531	Operative builders -----	98	443	9 211	97 004	60 067	*14 091	47 132	36 937	*1 296	21	21
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	35	1 039	23 934	121 986	74 999	33 492	44 018	46 987	2 390	7	8
1542	Nonresidential buildings, n.e.c. -----	76	1 794	36 703	284 745	141 891	73 755	(D)	142 854	1 793	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	37	1 000	24 103	118 050	96 231	63 253	40 261	21 819	2 895	4	3
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	8	190	4 606	17 656	14 155	8 098	6 057	3 501	(D)	6	5
1623	Water, sewer, and utility lines -----	27	490	9 180	37 606	33 609	20 845	(D)	3 997	1 303	12	11
1629	Heavy construction, n.e.c. -----	34	528	9 083	32 778	28 171	19 860	9 122	4 607	1 205	12	8

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees* *	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	LOUISVILLE, KY-IN MSA—Con.											
	Construction industries and land subdividers and developers—Con.											
	Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air- conditioning-----	335	3 699	70 709	258 650	233 631	138 454	97 374	25 019	3 837	4	3
	1721 Painting and paper hanging-----	108	885	15 450	34 972	33 099	24 764	(D)	1 873	755	9	5
	1731 Electrical work-----	175	1 974	43 226	118 678	109 339	64 326	45 792	9 339	1 717	4	3
	174 Masonry, stonework, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stonework-----	78	777	12 489	35 264	32 408	22 725	11 785	2 855	624	8	4
	1742 Plastering, drywall, and insulation work-----	75	1 313	21 717	70 796	65 710	40 124	(D)	5 086	971	12	13
	1743 Terrazzo, tile, marble, and mosaic work-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	175 Carpentry and floor work:											
	1751 Carpentry-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1752 Floor laying and other floorwork-----	33	160	2 268	6 449	6 350	4 553	*1 823	99	(S)	33	36
	1761 Roofing, siding, and sheet metal work-----	113	1 205	21 244	68 702	63 840	38 360	26 868	4 862	2 202	7	5
	1771 Concrete work-----	124	1 266	17 255	66 585	60 597	35 430	27 850	5 988	2 723	10	8
	1781 Water well drilling-----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection-----	*15	262	7 060	17 207	16 578	13 048	(D)	629	(D)	9	21
	1793 Glass and glazing work-----	19	239	5 283	18 958	18 678	11 511	9 022	280	177	17	24
	1794 Excavation work-----	48	325	5 544	20 880	19 499	11 184	8 369	1 381	388	16	15
	1795 Wrecking and demolition work-----	5	(D)	(D)	(D)	(D)	(D)	290	(D)	78	(D)	(D)
	1796 Installing building equipment, n.e.c.-----	25	535	14 573	40 982	37 202	27 803	(D)	3 781	728	5	3
	1799 Special trade contractors, n.e.c.-----	97	703	10 678	28 094	27 247	17 956	10 153	847	*141	23	23
6552	Land subdividers and developers, n.e.c.-----	19	70	1 255	4 162	3 191	2 508	744	971	42	20	25

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Michigan

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SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Michigan. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 61,599 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$17.3 billion in total value of business done.

Most of the 61,599 construction establishments were small. Of the total, 44,553 were nonemployers, and over half of the employer establishments had less than 5 employees. The 7,262 construction establishments with 5 employees or more, while representing only 12 percent of all establishments, accounted for more than 76 percent of the total value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$15.2 billion on total dollar value of business done. Of this amount, \$14.7 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$3.8 billion, leaving net value of construction work of \$10.9 billion. In addition, these establishments paid out \$4.8 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$6.9 billion. (See Introduction and appendixes for explanation of terms.)

There were 17,046 establishments with total employment averaging 140,085 during the year. Total payroll for 1987 was \$3.3 billion. Total hours worked by construction workers during the year were 188 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 44,553 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$2.0 billion. Most of these establishments, about 75 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**
(Percent)

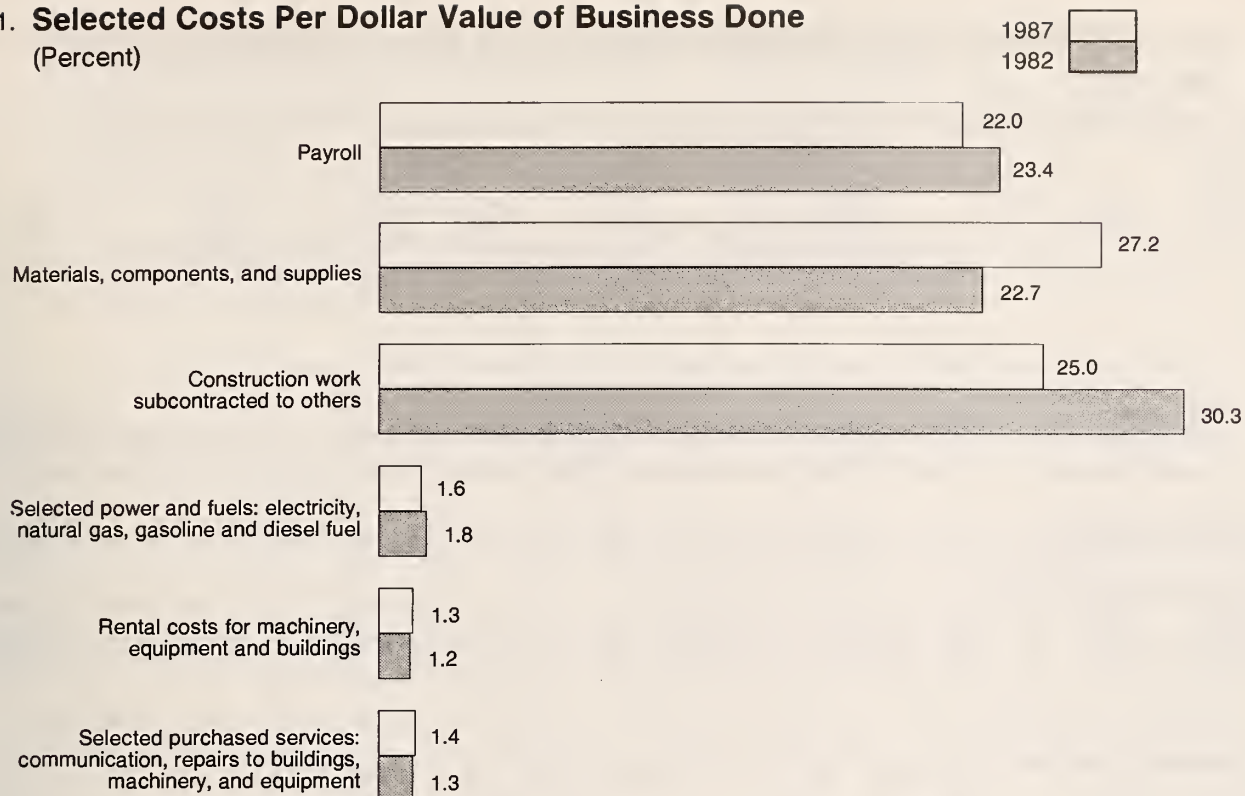


Figure 2. **Value of Construction Work by Type of Construction**
(Percent)

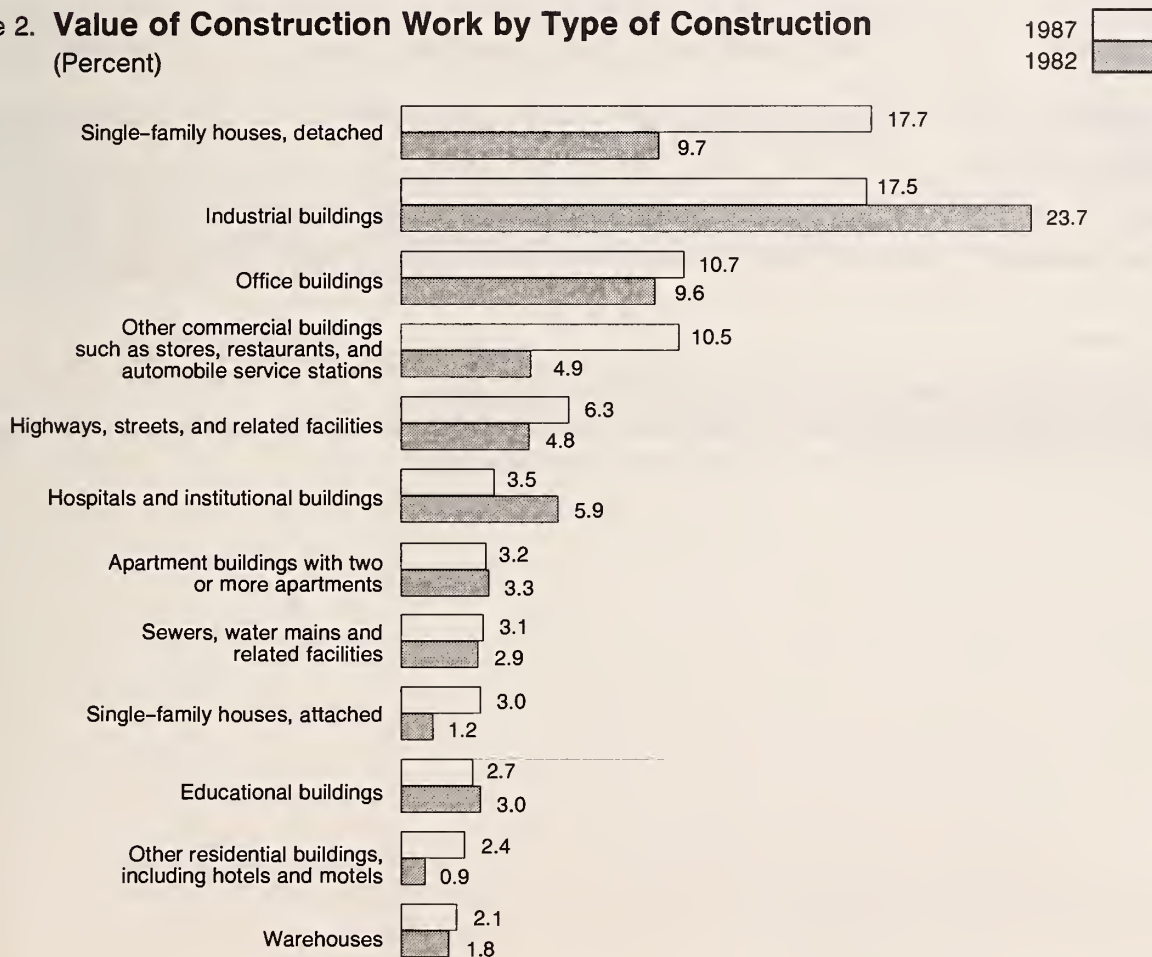


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done		Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1987													
	Construction industries and land subdividers and developers -----	61 599	48 072	140 085	17 255 267	44 553	43 773	2 042 889	17 046	4 299	140 085	15 212 378	1	1
15, 16, 17	Construction industries -----	60 596	47 067	139 596	16 929 699	43 667	42 789	1 788 052	16 929	4 278	139 596	15 141 647	1	1
15	Building construction—General contractors and operative builders ----	14 326	10 066	33 107	6 627 818	9 620	8 912	742 396	4 706	1 154	33 107	5 885 422	1	2
16	Heavy construction other than building construction— contractors-----	1 467	518	16 676	2 084 690	426	382	22 290	1 041	136	16 676	2 062 400	2	1
17	Special trade contractors -----	44 803	36 483	89 813	8 217 190	33 621	33 495	1 023 365	11 182	2 988	89 813	7 193 825	1	1
1711	Plumbing, heating, and air-conditioning --	5 087	3 281	19 591	1 924 368	2 812	2 757	128 491	2 275	524	19 591	1 795 877	2	1
1731	Electrical work -----	3 917	2 643	15 096	1 320 624	2 349	2 298	74 565	1 568	345	15 096	1 246 059	2	1
6552	Land subdividers and developers, n.e.c.²-----	993	997	477	325 555	886	984	254 837	107	13	477	70 718	14	17
	1982													
	Construction industries and land subdividers and developers -----	43 875	34 312	105 675	10 141 165	29 922	29 821	839 520	13 953	4 491	105 675	9 301 645	1	(W)
15, 16, 17	Construction industries -----	43 273	33 716	105 360	10 065 306	29 408	29 243	785 014	13 865	4 473	105 360	9 280 292	1	1
15	Building construction—General contractors and operative builders ----	10 952	8 269	20 444	3 604 697	7 459	7 214	308 891	3 493	1 055	20 444	3 295 806	2	1
16	Heavy construction other than building construction— contractors-----	1 704	1 018	23 286	2 242 485	819	810	26 123	885	208	23 286	2 216 362	1	1
17	Special trade contractors -----	30 617	24 429	61 630	4 218 124	21 130	21 219	450 000	9 487	3 210	61 630	3 768 124	1	1
1711	Plumbing, heating, and air-conditioning --	3 556	2 251	13 228	1 014 847	1 774	1 769	61 063	1 782	482	13 228	953 784	2	1
1731	Electrical work-----	3 217	2 252	10 717	808 570	1 924	1 884	46 218	1 293	368	10 717	762 352	2	1
6552	Land subdividers and developers, n.e.c.²-----	596	592	310	75 853	514	578	54 506	82	14	310	21 347	11	13

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

¹For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

²For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll ¹			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done ²		
	A	B	C	D	E	F	G	H	I	J	K	J	K
1987													
The State -----	61 599	48 072	140 085	17 255 267	44 553	43 773	2 042 889	17 046	4 299	140 085	15 212 378	1	1
\$10,000,000 or more -----	189	5	24 077	4 476 367	—	—	—	189	5	24 077	4 476 367	(W)	(W)
\$5,000,000 to \$9,999,999 -----	346	28	16 306	2 419 144	11	10	65 448	335	*18	16 306	2 353 696	1	3
\$2,500,000 to \$4,999,999 -----	670	33	17 345	2 311 483	33	21	104 705	637	12	17 345	2 206 778	1	3
\$1,000,000 to \$2,499,999 -----	1 777	222	25 103	2 729 856	137	113	209 939	1 640	109	25 103	2 519 917	2	3
\$500,000 to \$999,999 -----	2 584	543	19 129	1 813 074	305	234	207 061	2 279	309	19 129	1 606 013	3	3
\$250,000 to \$499,999 -----	3 631	1 443	15 848	1 277 326	742	668	252 827	2 889	775	15 848	1 024 499	4	4
\$100,000 to \$249,999 -----	7 714	4 607	15 358	1 232 590	2 917	2 749	443 264	4 797	1 858	15 358	789 326	4	3
\$50,000 to \$99,999 -----	(S)	(S)	(S)	(S)	4 302	4 226	303 633	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999 -----	(S)	(S)	(S)	(S)	6 160	6 045	217 061	(S)	(S)	(S)	(S)	(S)	(S)
Less than \$25,000 -----	(S)	(S)	(S)	(S)	29 946	29 707	238 950	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 -----	(NA)	(NA)	(NA)	(NA)	9 838	9 769	161 367	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 -----	(NA)	(NA)	(NA)	(NA)	6 534	6 453	47 499	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 -----	(NA)	(NA)	(NA)	(NA)	5 440	5 406	19 803	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 -----	(NA)	(NA)	(NA)	(NA)	8 134	8 079	10 282	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1982													
The State -----	43 875	34 312	105 675	10 141 165	29 922	29 821	839 520	13 953	4 491	105 675	9 301 645	1	(W)
\$10,000,000 or more -----	88	4	25 002	3 987 816	—	—	—	88	4	25 002	3 987 816	(W)	(W)
\$5,000,000 to \$9,999,999 -----	146	2	9 210	(D)	1	—	(D)	145	2	9 210	(D)	(W)	(D)
\$2,500,000 to \$4,999,999 -----	278	21	10 451	1 973 111	8	8	32 149	270	13	10 451	1 940 962	(W)	(W)
\$1,000,000 to \$2,499,999 -----	753	50	13 553	1 165 858	29	33	41 724	724	17	13 553	1 124 134	1	2
\$500,000 to \$999,999 -----	1 197	181	11 750	832 508	85	76	55 624	1 112	105	11 750	776 884	3	3
\$250,000 to \$499,999 -----	2 027	447	11 669	711 511	206	168	71 792	1 821	279	11 669	639 719	4	3
\$100,000 to \$249,999 -----	4 507	2 317	12 801	712 030	1 100	1 058	159 163	3 407	1 259	12 801	552 867	3	3
\$50,000 to \$99,999 -----	5 004	3 637	5 993	356 110	2 394	2 449	164 873	2 610	1 188	5 993	191 237	5	4
\$25,000 to \$49,999 -----	5 984	4 994	2 808	210 870	4 246	4 292	147 475	1 738	702	2 808	63 395	5	4
Less than \$25,000 -----	23 889	22 657	2 437	191 349	21 853	21 737	166 720	2 036	920	2 437	24 629	4	4
\$10,000 to \$24,999 -----	(NA)	(NA)	(NA)	(NA)	7 054	6 973	110 608	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 -----	(NA)	(NA)	(NA)	(NA)	5 389	5 380	36 548	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 -----	(NA)	(NA)	(NA)	(NA)	5 461	5 435	15 615	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 -----	(NA)	(NA)	(NA)	(NA)	3 949	3 949	3 949	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

¹For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

²For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	Construction industries and land subdividers and developers -----	17 046	140 085	110 453	3 340 818	2 425 766	188 157	14 654 738	10 851 030
15, 16, 17	Construction industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	2 868	12 298	9 626	195 562	138 199	14 988	1 211 838	858 113
1522	Other residential buildings -----	233	1 802	1 325	34 514	22 373	2 218	213 441	130 978
1531	Operative builders -----	321	2 244	802	62 537	15 021	1 591	732 842	354 246
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	278	5 925	4 509	168 246	101 088	7 797	1 140 377	378 669
1542	Nonresidential buildings, n.e.c. -----	1 006	10 838	8 048	274 410	185 170	14 328	2 216 361	914 336
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	325	5 636	4 736	152 954	116 770	8 570	859 953	692 864
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	33	675	562	22 862	16 805	1 066	112 063	82 467
1623	Water, sewer, and utility lines -----	291	4 811	4 013	128 486	96 660	7 549	505 274	439 156
1629	Heavy construction, n.e.c. -----	392	5 554	4 503	141 419	116 161	7 840	539 054	462 669
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	2 275	19 591	14 687	494 212	351 503	26 689	1 772 975	1 576 817
1721	Painting and paper hanging -----	830	5 662	4 850	115 249	84 635	7 984	304 613	271 090
1731	Electrical work -----	1 568	15 096	11 800	445 080	337 754	21 633	1 228 011	1 185 682
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	746	4 290	3 792	93 129	79 235	5 814	265 692	256 687
1742	Plastering, drywall, and insulation work -----	463	4 741	4 027	104 513	82 663	6 039	337 596	300 401
1743	Terrazzo, tile, marble, and mosaic work -----	194	798	652	19 277	15 256	1 251	58 700	57 970
175	Carpentry and floor work:								
1751	Carpentry -----	1 177	6 736	5 755	129 994	107 131	9 401	404 709	370 761
1752	Floor laying and other floor work -----	170	1 018	757	23 317	16 129	1 488	88 361	79 673
1761	Roofing, siding, and sheet metal work -----	773	7 623	6 055	169 336	123 274	9 996	608 683	561 111
1771	Concrete work -----	989	6 748	5 723	143 764	110 918	8 823	582 253	550 206
1781	Water well drilling -----	186	778	585	15 260	11 519	1 257	66 649	65 997
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	125	2 262	1 858	63 159	49 059	2 823	219 687	200 135
1793	Glass and glazing work -----	147	1 324	949	32 758	20 847	1 683	119 227	115 755
1794	Excavation work -----	606	3 391	2 777	77 818	56 761	4 682	312 220	289 339
1795	Wrecking and demolition work -----	77	654	521	17 769	12 177	951	81 751	75 778
1796	Installing building equipment, n.e.c. -----	173	2 933	2 402	90 602	72 421	4 263	263 255	217 998
1799	Special trade contractors, n.e.c. -----	683	6 168	4 989	113 297	84 456	7 220	361 966	335 625
6552	Land subdividers and developers, n.e.c. -----	107	477	125	11 281	1 771	200	47 174	26 496

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
6 915 232	4 372 868	3 803 707	194 796	278 704	1 849 180	105 675	8 991 253	4 182 301	1	1	2	15, 16, 17
												15
441 816	444 870	353 724	10 124	16 962	94 944	7 289	464 834	185 654	3	4	14	152
74 627	59 853	82 463	961	2 191	9 821	1 310	169 463	41 864	10	7	23	1521
194 030	(D)	378 595	2 376	6 311	45 649	785	95 527	32 072	7	10	24	1531
352 453	202 022	761 708	10 992	7 096	56 294	4 594	1 454 673	314 304	3	4	8	154
578 151	376 027	1 302 025	12 147	20 311	127 462	6 466	1 071 083	272 815	3	3	9	1542
												16
423 737	297 489	167 088	24 623	34 818	265 104	5 133	465 187	231 172	4	2	5	1611
39 162	43 495	29 595	1 112	2 435	19 581	669	65 999	34 897	6	4	21	162
282 096	165 565	66 118	16 751	21 039	133 114	3 711	294 138	165 762	3	3	9	1622
331 087	140 580	76 385	13 973	26 426	216 837	13 773	1 233 754	758 119	3	3	5	1623
												17
945 744	653 975	196 158	22 411	27 061	166 726	13 228	928 916	468 144	2	1	7	1711
202 149	72 143	33 522	4 226	6 674	27 771	3 389	114 786	83 624	4	4	18	1721
785 131	418 599	42 329	13 064	19 900	124 788	10 717	736 879	441 214	2	1	5	1731
177 002	82 766	9 005	2 890	6 733	29 263	2 961	106 293	66 414	3	3	12	174
182 489	128 979	37 195	3 316	5 176	22 643	3 693	189 872	117 060	3	4	16	1741
34 610	23 984	730	315	987	5 039	515	28 460	16 151	10	8	30	1742
												175
221 256	153 090	33 948	2 922	5 901	32 456	3 170	155 481	79 539	3	4	12	1751
45 616	39 624	8 687	1 079	1 642	7 887	884	39 319	22 931	9	6	21	1752
333 035	237 806	47 572	7 682	9 511	70 078	6 284	395 702	236 464	3	3	13	1761
332 759	223 285	32 046	7 878	17 734	99 212	3 644	187 730	104 168	4	3	9	1771
34 167	(D)	652	661	2 303	25 946	527	25 474	14 570	9	11	21	1781
143 815	58 886	19 552	5 084	2 569	15 729	2 667	127 081	84 852	3	3	6	179
65 421	58 770	3 471	1 765	2 186	11 301	1 146	75 472	40 082	6	6	22	1791
210 336	84 281	22 880	13 002	17 834	141 803	3 751	222 826	147 433	5	4	12	1793
67 723	9 119	5 973	5 320	4 812	19 090	376	20 640	17 848	10	5	24	1794
170 459	51 093	45 257	3 868	1 746	17 425	2 065	184 531	120 370	4	2	6	1795
223 339	125 176	26 341	6 100	7 949	48 926	2 613	124 544	76 750	5	5	13	1796
23 010	*5 939	20 678	143	386	14 277	310	12 582	8 020	14	15	28	1799

Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year	17 046	13 953	16 354	16 404	1	1	2	2
Proprietors and working partners	4 299	4 491	9 199	10 423	4	3	3	3
All employees**	140 085	105 675	128 198	130 828	1	1	1	1
Construction workers:								
March	92 489	70 197	83 053	84 603	1	1	1	1
May	112 039	85 322	112 002	106 659	1	1	1	2
August	123 768	92 442	122 138	121 437	1	1	1	2
November	113 518	82 881	112 054	107 387	1	1	1	1
Average	110 453	84 331	107 420	106 685	1	1	1	1
Other employees:								
March	28 228	20 995	19 408	23 006	1	1	1	2
May	29 549	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
August	30 525	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
November	30 253	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Average	29 634	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March	38 167	28 180	(NA)	(NA)	1	1	(NA)	(NA)
April to June	47 353	33 293	(NA)	(NA)	1	1	(NA)	(NA)
July to September	54 238	37 139	(NA)	(NA)	1	1	(NA)	(NA)
October to December	48 398	33 014	(NA)	(NA)	1	1	(NA)	(NA)
Total hours worked	188 157	131 628	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	3 340 818	2 178 928	1 923 025	1 527 569	(W)	(W)	(W)	1
Payroll, construction workers	2 425 766	1 663 174	1 537 235	1 220 662	(W)	1	(W)	1
Payroll, other employees	915 051	515 754	385 791	306 907	1	1	1	2
First quarter payroll, all employees	698 897	480 970	353 183	(NA)	1	1	(W)	(NA)
Employer costs for fringe benefits, all employees	846 861	366 886	407 629	(NA)	1	1	(W)	(NA)
Legally required expenditures	546 615	277 744	218 863	(NA)	1	1	1	(NA)
Voluntary expenditures	300 246	89 142	188 766	(NA)	1	1	(W)	(NA)
Dollar value of business done	15 212 378	9 301 645	7 759 714	5 961 230	1	(W)	1	1
Value of construction work ¹	14 654 738	8 991 253	7 549 535	5 746 253	1	(W)	1	1
Value of construction work subcontracted in from others	3 934 452	1 794 525	1 852 362	1 278 948	1	1	1	2
Land receipts ²	120 569	16 773	(NA)	(NA)	11	8	(NA)	(NA)
Other business receipts	437 070	293 619	210 179	214 977	2	1	2	13
Net value of construction†	10 851 030	6 174 978	5 608 217	4 169 334	1	1	1	2
Value added††	6 915 232	4 182 301	3 378 784	2 615 296	1	1	1	2
Selected costs	8 176 576	5 102 570	4 326 389	3 231 495	1	1	1	2
Materials, components, and supplies ³	4 132 394	2 115 457	2 248 550	1 654 576	1	1	1	2
Construction work subcontracted to others	3 803 707	2 816 275	1 941 319	1 576 919	2	1	1	2
Selected power, fuels, and lubricants	240 474	170 838	136 520	(NA)	1	1	1	(NA)
Electricity	27 627	20 067	14 087	(NA)	1	2	2	(NA)
Natural gas	15 508	13 091	11 199	(NA)	2	2	2	(NA)
Gasoline and diesel fuel	179 932	124 833	94 459	(NA)	1	1	1	(NA)
On highway use	126 771	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Off highway use	53 160	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Other, including lubricating oils and greases	17 406	12 845	16 779	(NA)	2	2	2	(NA)
Rental cost for machinery, equipment, and buildings	194 796	108 006	100 294	(NA)	2	1	1	(NA)
For machinery and equipment	131 884	77 430	79 995	86 580	3	1	1	3
For buildings	62 912	30 575	20 299	(NA)	2	2	1	(NA)
Selected purchased services	216 568	122 675	127 338	(NA)	1	1	1	(NA)
Communication services	62 719	36 716	31 237	(NA)	2	2	1	(NA)
Repairs to buildings and other structures	13 755	8 296	7 288	(NA)	3	2	3	(NA)
Repairs to machinery and equipment	140 093	77 662	88 813	(NA)	2	2	1	(NA)
Ownership of construction projects:								
Value of construction work	14 654 738	8 991 253	7 549 535	5 746 253	1	(W)	1	1
Government owned	2 318 567	1 501 923	1 427 024	1 521 687	3	2	1	2
Federal	549 367	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
State and local	1 769 199	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Privately owned	12 336 171	7 489 329	6 122 511	4 224 566	1	1	1	2

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

²Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

³For 1972, includes data for power, fuels, and lubricants.

Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 646 876	1 451 107	2	1
Capital expenditures, other than land -----	278 704	112 910	2	2
New -----	228 858	78 949	2	2
Used -----	49 846	33 961	5	4
Retirements and disposition of depreciable assets -----	76 400	67 092	6	2
End-of-year gross book value of depreciable assets -----	1 849 180	1 496 925	2	1
Depreciation charges during year -----	221 619	184 244	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	292 925	219 554	5	2
Capital expenditures, other than land -----	34 895	15 606	9	4
New buildings and other structures -----	27 912	13 424	10	3
Used buildings and other structures -----	6 983	2 182	10	14
Retirements and disposition of depreciable assets -----	10 908	9 072	21	8
End-of-year gross book value of depreciable assets -----	316 913	226 087	5	2
Depreciation charges during year -----	32 271	19 425	14	5
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 353 951	1 231 553	2	1
Capital expenditures, other than land -----	243 808	97 303	2	2
New machinery and equipment, including automobiles and trucks -----	200 945	65 524	2	2
New automobiles and trucks, intended primarily for highway use -----	88 866	27 861	3	3
Used machinery and equipment, including automobiles and trucks -----	42 863	31 778	6	4
Retirements and disposition of depreciable assets -----	65 492	58 019	5	2
End-of-year gross book value of depreciable assets -----	1 532 267	1 270 837	2	1
Depreciation charges during year -----	189 348	164 818	2	2

Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	17 046	1
Value of construction work	14 654 738	1
Establishments with inventories:		
Number	6 510	3
Value of construction work	7 314 578	2
Inventories¹:		
End of 1987, materials and supplies	190 584	3
End of 1986, materials and supplies	177 027	3
Establishments with no inventories:		
Number	8 020	2
Value of construction work	4 977 471	2
Establishments not reporting:		
Number	2 516	5
Value of construction work	2 362 689	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1987											
Number of establishments -----	17 046	9 782	3 907	2 021	978	244	92	16	3	1	
All employees** -----	140 085	20 392	24 915	26 550	29 313	16 476	13 445	5 346	3 644	(D)	
Payroll, all employees -----	3 340 818	313 718	474 821	602 819	794 425	488 362	412 755	168 206	85 710	(D)	
Construction worker hours (thousands) -----	188 157	25 896	32 050	33 236	39 670	23 660	21 107	7 519	5 015	(D)	
Dollar value business done -----	15 212 378	2 020 823	2 180 894	2 639 265	3 376 263	2 184 057	2 550 199	(D)	260 874	(D)	
Value of construction work ¹ -----	14 654 738	1 943 208	2 120 489	2 565 322	3 251 336	2 136 597	1 609 550	1 028 234	(D)	(D)	
Net value of construction work† -----	10 851 030	1 480 107	1 692 922	2 009 373	2 488 885	2 655 807	(D)	317 012	206 921	(D)	
Value added†† -----	6 915 232	832 440	1 013 910	1 218 404	1 596 022	957 069	805 696	364 448	127 241	(D)	
Cost of materials, components, supplies, and fuels -----	4 372 868	674 510	713 209	845 916	1 601 703	(D)	537 528	(D)	(D)	(D)	
Cost of construction work subcontracted to others -----	3 803 707	463 101	427 566	555 949	762 450	1 090 339	(D)	504 301	(D)	(D)	
Rental cost for machinery, equipment, and buildings -----	194 796	20 289	29 521	30 685	50 025	28 103	23 753	10 993	1 425	(D)	
Capital expenditures, other than land -----	278 704	43 844	52 395	48 458	69 376	29 033	23 076	12 520	(D)	(D)	
End-of-year gross book value of depreciable assets -----	1 849 180	285 558	329 709	324 879	427 088	220 003	163 553	98 387	(D)	(D)	
1982											
All employees** -----	105 675	18 063	16 685	15 795	17 330	10 938	9 203	2 464	15 196	(D)	
Value of construction work ¹ -----	8 991 253	930 375	980 890	1 082 890	1 491 141	1 081 299	724 826	278 750	2 421 081	(D)	
Value added†† -----	4 182 301	443 983	480 027	531 987	678 112	508 109	431 489	110 552	998 041	(D)	
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	2	3	2	1	1	2	(W)	(W)	(D)	
Net value of construction work† -----	1	3	3	2	1	(W)	(D)	(W)	(W)	(D)	
Capital expenditures, other than land -----	2	9	7	6	3	1	(W)	(W)	(D)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1987											
Number of establishments -----	17 046	(S)	(S)	(S)	4 797	2 889	2 279	1 640	637	335	189
All employees** -----	140 085	(S)	(S)	(S)	15 358	15 848	19 129	25 103	17 345	16 306	24 077
Payroll, all employees -----	3 340 818	(S)	(S)	(S)	209 165	277 066	392 815	611 436	501 596	497 479	786 796
Construction worker hours (thousands) -----	188 157	(S)	(S)	(S)	20 060	20 633	24 023	33 603	23 890	23 465	35 151
Dollar value of business done -----	15 212 378	(S)	(S)	(S)	789 326	1 024 499	1 606 013	2 519 917	2 206 778	2 353 696	4 476 367
Value of construction work ¹ -----	14 654 738	(S)	(S)	(S)	780 541	1 006 904	1 564 362	2 438 455	2 125 621	2 284 389	4 222 289
Net value of construction work† -----	10 851 030	(S)	(S)	(S)	724 385	911 315	1 332 572	1 992 410	1 615 337	1 680 086	2 376 898
Value added†† -----	6 915 232	(S)	(S)	(S)	435 458	552 815	783 139	1 245 194	1 007 249	1 051 277	1 705 652
Cost of materials, components, supplies, and fuels -----	4 372 868	(S)	(S)	(S)	296 566	372 287	582 194	801 245	651 344	677 527	905 132
Cost of construction work subcontracted to others -----	3 803 707	(S)	(S)	(S)	56 156	95 588	231 790	446 045	510 283	604 302	1 845 391
Rental cost for machinery, equipment, and buildings -----	194 796	(S)	(S)	(S)	8 162	12 932	23 633	33 972	30 469	34 864	47 911
Capital expenditures, other than land -----	278 704	(S)	(S)	(S)	22 345	31 439	38 466	50 628	40 116	33 198	56 310
End-of-year gross book value of depreciable assets -----	1 849 180	(S)	(S)	(S)	148 853	185 597	232 814	348 347	280 728	210 642	393 463
1982											
All employees** -----	105 675	2 437	2 808	5 993	12 801	11 669	11 750	13 553	10 451	9 210	25 002
Value of construction work ¹ -----	8 991 253	24 276	62 592	188 583	543 405	619 207	750 834	1 101 204	907 984	977 943	3 815 224
Value added†† -----	4 182 301	13 198	34 018	102 858	282 783	328 745	385 401	563 589	464 976	433 606	1 573 124
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	4	4	3	2	1	1	(W)
Net value of construction work† -----	1	(S)	(S)	(S)	3	4	3	2	2	2	(W)
Capital expenditures, other than land -----	2	(S)	(S)	(S)	9	9	9	6	7	4	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work ¹				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction ²	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
1987								
Value of construction work ¹	14 654 738	8 969 264	3 404 909	1 658 941	1	1	1	1
Building construction	11 321 042	7 393 548	2 650 290	1 229 183	1	1	2	2
Single-family houses.....	3 039 231	2 105 908	615 798	317 524	3	4	5	4
Single-family houses, detached.....	2 591 221	1 736 085	568 944	286 192	3	4	5	4
Single-family houses, attached.....	448 010	369 823	46 854	31 332	9	11	10	10
Apartment buildings with two or more apartments.....	472 589	354 269	56 044	62 275	4	5	8	7
Other residential buildings, including hotels and motels.....	345 017	257 556	53 586	33 875	3	4	7	7
Hotels and motels.....	242 207	201 669	24 391	16 147	3	4	7	6
Other residential buildings, excluding hotels and motels.....	102 810	55 887	29 195	17 727	7	9	12	13
Office buildings.....	1 569 254	1 132 933	279 581	155 739	2	3	3	3
Other commercial buildings such as stores, restaurants, and automobile service stations.....	1 533 940	934 483	417 882	181 574	2	2	3	3
Industrial buildings and warehouses.....	2 876 196	1 805 341	749 882	320 972	1	1	3	2
Industrial buildings.....	2 567 392	1 569 346	701 427	296 618	1	2	3	2
Warehouses.....	308 803	235 995	48 454	24 353	4	5	5	5
Religious buildings.....	151 586	77 263	48 105	26 216	4	6	5	4
Educational buildings.....	399 859	166 931	177 328	55 600	4	3	7	6
Hospitals and institutional buildings.....	507 465	287 509	175 615	44 340	2	2	2	4
Farm buildings.....	83 048	48 802	20 352	13 892	15	20	30	14
Amusement, social, and recreational buildings.....	175 650	150 325	17 916	7 408	1	1	4	8
Other nonresidential buildings.....	119 185	71 228	38 201	9 768	7	3	21	13
Land development for buildings.....	48 022	(NA)	(NA)	(NA)	9	(NA)	(NA)	(NA)
Nonbuilding construction	2 760 095	1 575 717	754 619	429 759	1	2	2	3
Highways, streets, and related facilities.....	926 238	371 462	413 596	141 179	2	4	2	5
Parking areas including private driveways.....	123 043	55 868	35 546	31 627	8	10	8	15
Recreational facilities such as athletic fields, golf courses, and outdoor tennis courts.....	124 581	120 506	*2 992	1 081	7	6	50	27
Bridges, tunnels, and elevated highways.....	122 967	80 595	34 081	8 290	3	3	5	23
Tunnels.....	3 087	1 864	(D)	(D)	25	30	(D)	(D)
Bridges and elevated highways.....	119 879	78 730	(D)	(D)	3	3	(D)	(D)
Marine construction.....	44 029	27 691	7 984	8 353	4	3	5	4
Power and communication transmission lines, towers, and related facilities.....	164 928	103 379	37 506	24 042	6	5	11	7
Sewers, water mains, and related facilities.....	451 483	346 840	45 855	45 787	4	4	7	9
Sewers, sewer lines, and related facilities.....	269 039	206 398	39 269	23 371	3	3	10	12
Water mains and related facilities.....	182 443	140 442	19 517	22 483	6	6	6	12
Pipeline, other than sewer or water lines.....	65 226	43 501	13 331	8 392	3	3	7	8
Blast furnaces, petroleum refineries, and chemical complexes.....	164 511	76 526	37 645	50 338	2	2	3	3
Power plants.....	122 059	36 073	33 578	52 407	1	1	(W)	1
Power plants, nuclear.....	22 360	(D)	7 719	(W)	(W)	(D)	(D)	(W)
Power plants, except nuclear.....	99 698	(D)	(D)	44 688	1	(D)	(D)	1
Sewage treatment and water treatment plants.....	124 963	84 814	37 360	2 788	6	8	5	18
Sewage treatment plants.....	88 147	63 230	22 954	1 963	8	11	6	26
Water treatment plants.....	36 815	21 583	14 406	825	3	2	8	4
Earthmoving, nonbuilding.....	93 079	84 825	3 507	4 746	8	8	8	39
Other nonbuilding construction.....	232 988	143 637	38 706	50 661	5	5	4	14
Construction work, n.s.k.	573 600	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
1982								
Value of construction work ¹	8 991 253	7 122 935	(NA)	1 868 318	(W)	(W)	(NA)	1
Building construction	6 081 545	4 775 633	(NA)	1 305 912	1	1	(NA)	1
Single-family houses.....	982 719	661 206	(NA)	321 513	2	3	(NA)	3
Single-family houses, detached.....	876 191	574 134	(NA)	302 056	3	3	(NA)	3
Single-family houses, attached.....	106 527	87 071	(NA)	19 456	5	6	(NA)	9
Apartment buildings with two or more apartments.....	299 774	243 758	(NA)	56 016	3	3	(NA)	6
Other residential buildings, including hotels and motels.....	84 285	69 043	(NA)	15 241	4	5	(NA)	6
Office buildings.....	863 256	612 269	(NA)	250 987	1	2	(NA)	1
Other commercial buildings such as stores, restaurants, and automobile service stations.....	440 800	324 678	(NA)	116 121	2	3	(NA)	4
Industrial buildings and warehouses.....	2 289 369	1 927 053	(NA)	362 316	1	1	(NA)	2
Industrial buildings.....	2 127 267	1 788 117	(NA)	339 150	1	1	(NA)	2
Warehouses.....	162 101	138 935	(NA)	23 166	3	3	(NA)	4
Religious buildings.....	88 215	62 428	(NA)	25 787	3	4	(NA)	3
Educational buildings.....	267 684	205 292	(NA)	62 391	1	1	(NA)	4
Hospitals and institutional buildings.....	533 310	463 136	(NA)	70 174	1	1	(NA)	4
Farm buildings.....	52 800	43 303	(NA)	9 497	10	10	(NA)	11
Amusement, social, and recreational buildings.....	132 325	124 401	(NA)	7 924	2	2	(NA)	8
Other nonresidential buildings.....	47 008	39 066	(NA)	7 945	5	4	(NA)	11
Nonbuilding construction	2 445 604	1 975 173	(NA)	470 431	1	(W)	(NA)	1
Highways, streets, and related facilities.....	433 773	248 462	(NA)	185 310	2	2	(NA)	3
Bridges, tunnels, and elevated highways.....	97 029	87 552	(NA)	9 476	1	1	(NA)	1
Marine construction.....	43 606	29 518	(NA)	14 088	2	2	(NA)	(W)
Conservation and development construction.....	37 779	34 175	(NA)	3 604	6	6	(NA)	18
Power and communication transmission lines, towers, and related facilities.....	78 270	62 613	(NA)	15 657	3	3	(NA)	3
Sewers, water mains, and related facilities.....	258 195	216 953	(NA)	41 241	3	3	(NA)	3
Sewers, sewer lines, and related facilities.....	176 128	149 246	(NA)	26 881	3	3	(NA)	5
Water mains and related facilities.....	82 067	67 707	(NA)	14 359	5	5	(NA)	5
Pipeline, other than sewer or water lines.....	60 454	48 688	(NA)	11 786	1	1	(NA)	5
Blast furnaces, petroleum refineries, and chemical complexes.....	34 113	23 162	(NA)	10 950	2	1	(NA)	3
Power plants.....	1 138 209	1 015 404	(NA)	123 804	(W)	(W)	(NA)	(W)
Sewage treatment and water treatment plants.....	149 597	129 069	(NA)	20 528	2	2	(NA)	4
Sewage treatment plants.....	119 394	107 767	(NA)	11 626	2	2	(NA)	8
Water treatment plants.....	30 203	21 301	(NA)	8 901	1	2	(NA)	1
Other nonbuilding construction.....	113 579	79 576	(NA)	34 006	8	10	(NA)	14
Construction work, n.s.k.	464 103	372 129	(NA)	91 974	2	3	(NA)	3

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

²In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".

Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
		A	B	C	D	E	F	G
	Construction industries and land subdividers and developers -----	17 046	110 453	188 157	92 489	38 167	112 039	47 353
15, 16, 17	Construction industries:							
15	Building construction—General contractors and operative builders:							
152	General contractors, residential buildings:							
1521	Single-family houses -----	2 868	9 626	14 988	8 504	2 992	9 982	3 867
1522	Other residential buildings -----	233	1 325	2 218	1 184	530	1 339	544
1531	Operative builders -----	321	802	1 591	715	346	793	401
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	278	4 509	7 797	4 164	1 823	4 535	1 950
1542	Nonresidential buildings, n.e.c. -----	1 006	8 048	14 328	6 992	3 077	7 962	3 614
16	Heavy construction other than building construction—contractors:							
1611	Highway and street construction -----	325	4 736	8 570	1 793	715	5 308	2 318
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	33	562	1 066	403	178	647	316
1623	Water, sewer, and utility lines -----	291	4 013	7 549	2 917	1 281	4 117	1 856
1629	Heavy construction, n.e.c. -----	392	4 503	7 840	2 973	1 150	4 166	1 820
17	Special trade contractors:							
1711	Plumbing, heating, and air-conditioning ----	2 275	14 687	26 689	13 583	6 029	14 272	6 413
1721	Painting and paper hanging -----	830	4 850	7 984	4 050	1 639	5 023	2 028
1731	Electrical work -----	1 568	11 800	21 633	11 448	5 103	11 678	5 456
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	746	3 792	5 814	3 064	1 066	4 013	1 542
1742	Plastering, drywall, and insulation work --	463	4 027	6 039	3 790	1 487	3 962	1 418
1743	Terrazzo, tile, marble, and mosaic work --	194	652	1 251	576	292	637	338
175	Carpentry and floor work:							
1751	Carpentry -----	1 177	5 755	9 401	4 956	2 003	5 906	2 384
1752	Floor laying and other floor work -----	170	757	1 488	776	373	730	353
1761	Roofing, siding, and sheet metal work -----	773	6 055	9 996	5 025	2 008	6 026	2 459
1771	Concrete work -----	989	5 723	8 823	3 264	1 164	6 344	2 401
1781	Water well drilling -----	186	585	1 257	524	271	591	314
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	125	1 858	2 823	1 793	727	1 933	720
1793	Glass and glazing work -----	147	949	1 683	892	373	946	422
1794	Excavation work -----	606	2 777	4 682	2 203	870	2 998	1 238
1795	Wrecking and demolition work -----	77	521	951	433	170	442	213
1796	Installing building equipment, n.e.c. -----	173	2 402	4 263	2 524	1 119	2 399	1 009
1799	Special trade contractors, n.e.c. -----	683	4 989	7 220	3 813	1 316	5 144	1 901
6552	Land subdividers and developers, n.e.c. --	107	125	200	116	55	133	44

¹Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
123 768	54 238	113 518	48 398	1	1	1	1	1	1	1	1	1	1	15, 16, 17
														15
10 605 1 388	4 361 576	9 412 1 390	3 767 567	4 11	5 16	4 11	5 15	4 12	5 16	4 12	5 16	4 13	5 17	152 1521 1522
854	434	846	407	10	12	9	12	10	13	10	13	12	13	1531 154
4 781 9 002	2 070 4 014	4 557 8 235	1 952 3 622	3 3	3 4	3 4	3 6	3 4	3 6	3 3	4 4	3 3	4 4	1541 1542
														16
6 538	3 262	5 308	2 274	5	6	5	7	4	6	5	7	6	8	1611 162 1622
661 4 597 5 545	331 2 294 2 505	535 4 423 5 329	238 2 118 2 365	5 3 3	8 4 5	3 3 4	8 4 5	6 3 4	9 4 5	7 3 3	9 5 5	5 3 3	6 4 5	1623 1629
														17
15 737	7 254	15 158	6 991	2	2	2	2	2	2	2	2	2	2	1711
5 692	2 382	4 635	1 933	4	7	5	7	5	6	5	7	5	8	1721
12 337	5 766	11 739	5 307	2	2	2	2	2	2	2	2	2	2	1731 174
4 257 4 275 659	1 673 1 547 313	3 837 4 083 736	1 532 1 586 306	3 3 10	5 4 13	4 3 9	6 4 14	4 4 11	5 4 16	4 4 10	5 4 15	3 3 11	4 4 13	1741 1742 1743
6 511 787	2 704 390	5 650 736	2 309 370	3 9	5 9	4 9	6 10	4 9	5 9	4 8	6 8	4 10	6 10	175 1751 1752
6 731	2 920	6 439	2 606	3	3	3	4	3	4	3	4	3	4	1761
7 206	3 039	6 087	2 217	4	5	5	8	4	6	4	5	4	5	1771
645	363	581	307	9	12	10	13	9	12	8	11	10	13	1781 179
1 898 1 003 3 066 615 2 283 5 959	711 453 1 371 275 1 007 2 161	1 807 955 2 842 595 2 403 5 064	663 433 1 202 292 1 127 1 840	3 6 5 9 3 5	4 8 7 13 3 6	3 6 6 9 3 5	4 8 7 13 3 6	3 6 6 9 3 5	4 9 7 14 4 6	3 6 6 9 4 6	4 9 7 15 4 7	3 6 5 9 5 6	4 8 7 13 5 7	1791 1793 1794 1795 1796 1799
127	49	124	52	27	31	28	32	33	29	28	33	29	33	6552

Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	Construction industries and land subdividers and developers -----	8.2	23.9	1 703.5	132.7	.228	.298	.260	.013
15, 16, 17	Construction industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.3	15.9	1 557.0	125.9	.161	.367	.292	.008
1522	Other residential buildings -----	7.7	19.2	1 674.0	161.1	.162	.280	.386	.005
1531	Operative builders -----	7.0	27.9	1 983.8	913.8	.085	(D)	.517	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	21.3	28.4	1 729.2	252.9	.148	.177	.668	.010
1542	Nonresidential buildings, n.e.c. -----	10.8	25.3	1 780.3	275.4	.124	.170	.587	.005
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	17.3	27.1	1 809.5	181.6	.178	.346	.194	.029
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	20.5	33.9	1 896.8	199.4	.204	.388	.264	.010
1623	Water, sewer, and utility lines -----	16.5	26.7	1 881.1	125.9	.254	.328	.131	.033
1629	Heavy construction, n.e.c. -----	14.2	25.5	1 741.1	119.7	.262	.261	.142	.026
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	8.6	25.2	1 817.2	120.7	.279	.369	.111	.013
1721	Painting and paper hanging -----	6.8	20.4	1 646.2	62.8	.378	.237	.110	.014
1731	Electrical work -----	9.6	29.5	1 833.3	104.1	.362	.341	.034	.011
174	Masonry, stone work, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	5.8	21.7	1 533.2	70.1	.351	.312	.034	.011
1742	Plastering, drywall, and insulation work -----	10.2	22.0	1 499.6	83.8	.310	.382	.110	.010
1743	Terrazzo, tile, marble, and mosaic work -----	4.1	24.2	1 918.7	90.0	.328	.409	.012	.005
175	Carpentry and floor work:								
1751	Carpentry -----	5.7	19.3	1 633.5	70.3	.321	.378	.084	.007
1752	Floor laying and other floor work -----	6.0	22.9	1 965.7	116.7	.264	.448	.098	.012
1761	Roofing, siding, and sheet metal work -----	9.9	22.2	1 650.9	100.5	.278	.391	.078	.013
1771	Concrete work -----	6.8	21.3	1 541.7	101.7	.247	.383	.055	.014
1781	Water well drilling -----	4.2	19.6	2 148.7	113.9	.229	(D)	.010	.010
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	18.1	27.9	1 519.4	118.2	.287	.268	.089	.023
1793	Glass and glazing work -----	9.0	24.7	1 773.4	125.6	.275	.493	.029	.015
1794	Excavation work -----	5.6	22.9	1 686.0	112.4	.249	.270	.073	.042
1795	Wrecking and demolition work -----	8.5	27.2	1 825.3	156.9	.217	.112	.073	.065
1796	Installing building equipment, n.e.c. -----	17.0	30.9	1 774.8	109.6	.344	.194	.172	.015
1799	Special trade contractors, n.e.c. -----	9.0	18.4	1 447.2	72.6	.313	.346	.073	.017
6552	Land subdividers and developers, n.e.c. -----	4.5	23.6	1 600.0	377.4	.239	.126	.438	.003

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	DETROIT-ANN ARBOR, MI CMSA											
	Construction Industries and land subdividers and developers	8 184	75 837	1 966 378	8 637 296	6 248 309	4 091 496	2 431 548	2 388 987	141 318	1	1
	Construction Industries:											
	Building construction—General contractors and operative builders:											
	General contractors, residential buildings:											
	Single-family houses	1 116	5 430	94 282	569 214	392 928	208 331	199 111	176 286	8 441	5	5
	Other residential buildings	78	657	14 740	96 955	57 769	41 082	19 515	39 185	1 067	14	11
	Operative builders	231	1 710	48 938	591 676	282 038	156 613	146 180	309 638	4 251	8	11
	General contractors, nonresidential buildings:											
	Industrial buildings and warehouses	139	2 783	92 853	594 131	139 828	188 856	(D)	454 304	2 854	4	8
	Nonresidential buildings, n.e.c.	498	5 145	139 993	1 287 431	475 552	310 897	(D)	811 880	10 257	5	5
	Heavy construction other than building construction—contractors:											
	Highway and street construction	140	2 941	76 025	494 256	387 074	231 202	163 709	107 182	13 083	8	3
	Heavy construction, except highway: Bridge, tunnel, and elevated											
	highway construction	22	532	18 913	95 535	68 806	31 035	(D)	26 729	1 449	4	3
	Water, sewer, and utility lines	134	2 081	61 708	266 595	231 616	138 788	95 504	34 979	7 556	4	4
	Heavy construction, n.e.c.	149	3 773	99 554	380 859	322 999	225 404	101 925	57 861	17 796	3	2
	Special trade contractors:											
	Plumbing, heating, and air- conditioning	1 128	10 776	298 330	1 017 047	905 473	564 692	351 598	111 574	13 688	2	2
	Painting and paper hanging	448	3 346	77 207	203 821	175 666	132 509	44 292	28 155	2 783	6	4
	Electrical work	778	8 211	267 101	726 702	704 684	487 744	227 386	22 018	10 946	2	2
	Masonry, stonework, tile setting, and plastering:											
	Masonry, stone setting, and other stonework	385	2 357	53 921	149 261	143 103	100 704	45 221	6 158	3 789	5	4
	Plastering, drywall, and insulation work	211	2 704	64 256	191 711	176 195	113 251	71 097	15 516	2 110	4	4
	Terrazzo, tile, marble, and mosaic work	143	643	16 035	47 205	46 710	28 560	(D)	495	744	10	8
	Carpentry and floor work:											
	Carpentry	628	4 656	95 544	287 111	263 610	162 174	103 856	23 501	4 194	4	4
	Floor laying and other floorwork	85	684	15 966	61 569	54 789	32 444	27 483	6 780	1 243	12	8
	Roofing, siding, and sheet metal work	382	4 045	99 791	372 190	333 943	200 307	135 403	38 247	5 534	4	3
	Concrete work	523	3 847	90 282	364 025	342 972	209 845	135 050	21 053	10 217	4	4
	Water well drilling	33	210	4 764	18 763	18 550	9 278	(D)	213	670	12	22
	Miscellaneous special trade contractors:											
	Structural steel erection	55	1 503	40 926	148 557	136 797	100 643	36 564	11 761	1 900	4	4
	Glass and glazing work	103	881	21 837	81 943	79 113	44 412	37 922	2 830	1 381	7	6
	Excavation work	244	1 213	30 658	123 814	117 173	81 059	38 769	6 641	9 475	8	8
	Wrecking and demolition work	46	325	8 374	42 536	39 568	34 082	5 851	2 968	*1 584	15	7
	Installing building equipment, n.e.c.	90	2 027	65 807	192 848	152 986	121 968	33 847	39 862	1 272	4	2
	Special trade contractors, n.e.c.	335	3 090	60 626	194 268	177 088	117 785	63 645	17 180	2 831	6	6
6552	Land subdividers and developers, n.e.c.	61	268	7 952	37 274	21 280	17 832	*5 212	15 994	*203	16	17
15,16, 17	ANN ARBOR, MI PMSA											
	Construction Industries and land subdividers and developers	479	4 173	106 145	518 378	397 419	244 177	163 002	120 958	8 295	3	2
	Construction Industries:											
	Building construction—General contractors and operative builders:											
	General contractors, residential buildings:											
	Single-family houses	86	363	7 773	54 645	35 205	19 991	(D)	19 440	*461	18	14
	Other residential buildings	4	60	(D)	3 226	(D)	2 225	*503	(D)	(D)	8	(D)
	Operative builders	11	112	3 468	37 561	20 937	6 241	14 696	16 624	416	30	26
	General contractors, nonresidential buildings:											
	Industrial buildings and warehouses	4	46	(D)	(D)	3 845	1 751	2 094	(D)	(D)	(W)	(W)
	Nonresidential buildings, n.e.c.	56	398	8 337	56 117	26 845	14 086	13 625	29 273	1 118	31	7

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17 16	ANN ARBOR, MI PMSA—Con.											
	Construction industries and land subdividers and developers—Con.											
	Construction industries—Con.											
	Heavy construction other than building construction—contractors:											
	1611 Highway and street construction -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction-----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1623 Water, sewer, and utility lines -----	9	232	6 281	47 253	37 861	16 615	(D)	9 392	1 577	(W)	(W)
	1629 Heavy construction, n.e.c. -----	13	475	(D)	(D)	(D)	(D)	(D)	(D)	284	4	(D)
	17 Special trade contractors:											
	1711 Plumbing, heating, and air- conditioning-----	35	550	14 544	54 083	48 364	29 905	19 077	5 719	794	4	4
	1721 Painting and paper hanging-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1731 Electrical work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	174 Masonry, stonework, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stonework-----	30	138	3 244	9 141	8 716	6 270	(D)	425	280	18	14
	1742 Plastering, drywall, and insulation work-----	14	186	5 650	26 795	(D)	11 383	10 822	(D)	(D)	1	(D)
	1743 Terrazzo, tile, marble, and mosaic work-----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	175 Carpentry and floor work:											
	1751 Carpentry-----	22	113	2 460	5 353	4 938	3 678	(D)	*415	*130	27	32
	1752 Floor laying and other floorwork-----	4	16	290	(D)	952	645	(D)	(D)	(D)	(W)	(W)
15,16, 17 16	1761 Roofing, siding, and sheet metal work-----	10	201	4 037	14 638	14 265	8 563	(D)	373	190	13	11
	1771 Concrete work -----	40	197	3 008	15 332	14 537	7 521	7 034	795	*622	23	18
	1781 Water well drilling -----	4	25	1 044	3 073	(D)	2 119	(D)	(D)	(D)	(W)	(D)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1793 Glass and glazing work -----	7	94	1 660	8 660	8 525	4 586	(D)	135	(D)	(W)	(W)
	1794 Excavation work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1795 Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1796 Installing building equipment, n.e.c.-----	5	24	627	1 909	1 909	1 538	(D)	-	(D)	(W)	(W)
	1799 Special trade contractors, n.e.c.-----	*18	119	2 382	6 513	6 344	4 688	(D)	169	*53	16	23
	6552 Land subdividers and developers, n.e.c.-----	*6	47	809	*2 587	(D)	*2 665	95	(D)	-	33	(D)
	DETROIT, MI PMSA											
	Construction industries and land subdividers and developers-----	7 705	71 664	1 860 232	8 118 918	5 850 890	3 847 320	2 268 545	2 268 028	133 023	1	1
	Construction industries:											
	Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses -----	1 030	5 067	86 509	514 569	357 724	188 341	(D)	156 846	7 980	5	6
	1522 Other residential buildings -----	74	596	(D)	93 729	(D)	38 857	19 012	(D)	(D)	16	(D)
	1531 Operative builders -----	220	1 598	45 470	554 115	261 101	150 372	131 484	293 014	3 836	8	12
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses-----	135	2 737	(D)	(D)	135 983	187 105	(D)	(D)	(D)	4	8
	1542 Nonresidential buildings, n.e.c.-----	442	4 747	131 656	1 231 314	448 707	296 811	(D)	782 607	9 139	4	5
16	Heavy construction other than building construction—contractors:											
	1611 Highway and street construction -----	138	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	162 Heavy construction, except highway:											
	1622 Bridge, tunnel, and elevated highway construction-----	20	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1623 Water, sewer, and utility lines -----	125	1 849	55 427	219 342	193 755	122 173	(D)	25 587	5 979	4	4
	1629 Heavy construction, n.e.c.-----	136	3 297	(D)	(D)	(D)	(D)	(D)	(D)	17 512	3	(D)

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
											B	E
	DETROIT, MI PMSA—Con.											
15,16, 17	Construction Industries and land subdividers and developers—Con. Construction Industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	1 093	10 226	283 786	962 964	857 109	534 788	332 521	105 855	12 895	2	2
1721	Painting and paper hanging	412	3 227	74 607	197 786	169 696	127 433	43 399	28 090	2 579	6	4
1731	Electrical work	739	7 745	253 290	690 727	670 095	464 612	215 685	20 632	10 500	2	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	354	2 219	50 677	140 120	134 387	94 434	(D)	5 733	3 509	5	4
1742	Plastering, drywall, and insulation work	197	2 518	58 606	164 916	(D)	101 868	60 275	(D)	(D)	5	(D)
1743	Terrazzo, tile, marble, and mosaic work	141	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	606	4 543	93 084	281 758	258 671	158 496	(D)	23 087	4 064	4	4
1752	Floor laying and other floorwork	81	668	15 676	(D)	53 837	31 799	(D)	(D)	(D)	12	9
1761	Roofing, siding, and sheet metal work	372	3 844	95 754	357 552	319 678	191 745	(D)	37 874	5 344	4	3
1771	Concrete work	483	3 651	87 274	348 693	328 435	202 324	128 016	20 258	9 595	4	4
1781	Water well drilling	29	185	3 720	15 690	(D)	7 159	(D)	(D)	(D)	13	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	53	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work	96	787	20 177	73 283	70 588	39 826	(D)	2 695	(D)	8	7
1794	Excavation work	226	1 172	29 950	120 486	113 878	78 449	38 039	6 608	8 939	8	8
1795	Wrecking and demolition work	45	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	85	2 003	65 180	190 939	151 077	120 430	(D)	39 862	(D)	4	2
1799	Special trade contractors, n.e.c.	318	2 972	58 244	187 755	170 744	113 097	(D)	17 011	2 779	6	6
6552	Land subdividers and developers, n.e.c.	55	221	7 143	34 687	(D)	15 167	*5 117	(D)	*203	19	(D)
	GRAND RAPIDS, MI MSA											
	Construction Industries and land subdividers and developers	1 562	15 146	347 075	1 626 989	1 190 367	727 054	503 177	436 621	35 382	1	2
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	226	1 071	17 270	107 109	75 192	41 248	37 616	31 918	1 652	9	12
1522	Other residential buildings	*26	286	5 853	55 077	32 544	14 069	(D)	22 533	(D)	18	8
1531	Operative builders	14	174	5 008	47 403	30 663	13 341	(D)	16 740	1 114	21	24
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	29	756	19 966	204 445	66 689	51 928	27 739	137 756	1 498	4	4
1542	Nonresidential buildings, n.e.c.	90	1 576	38 612	265 549	123 098	75 732	51 426	142 451	3 103	5	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	25	551	14 674	64 610	53 421	35 507	20 890	11 189	4 656	9	6
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	44	853	21 813	86 767	76 699	49 046	(D)	10 068	3 038	10	8
1629	Heavy construction, n.e.c.	21	104	2 749	9 227	8 291	6 469	(D)	936	(D)	14	27

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

(Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes)

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	GRAND RAPIDS, MI MSA—Con.											
	Construction industries and land subdividers and developers—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	193	2 007	53 185	218 923	192 217	110 022	84 437	26 706	3 939	4	4
1721	Painting and paper hanging-----	97	622	11 292	29 143	28 025	20 203	8 636	1 118	*1 458	12	11
1731	Electrical work -----	148	1 654	39 520	131 526	124 575	69 543	55 279	*6 950	2 151	5	4
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	90	513	11 431	34 997	34 313	24 356	10 203	*684	595	11	10
1742	Plastering, drywall, and insulation work -----	57	746	14 662	51 420	46 849	26 609	(D)	4 572	1 027	9	7
1743	Terrazzo, tile, marble, and mosaic work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
175	Carpentry and floor work:											
1751	Carpentry -----	80	548	10 903	34 657	31 491	18 332	13 174	3 166	574	8	12
1752	Floor laying and other floorwork-----	23	169	3 901	12 793	12 266	6 918	(D)	527	147	(W)	1
1761	Roofing, siding, and sheet metal work -----	88	974	19 465	63 359	61 260	36 072	29 174	2 099	1 405	5	5
1771	Concrete work -----	130	974	22 169	86 371	81 391	49 527	34 409	4 980	2 450	9	9
1781	Water well drilling -----	15	68	1 412	(D)	(D)	3 717	2 731	(D)	(D)	30	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	6	65	1 719	4 437	3 993	2 984	(D)	444	165	(W)	(W)
1793	Glass and glazing work -----	6	80	2 086	7 804	(D)	3 643	4 156	(D)	158	(W)	(D)
1794	Excavation work -----	43	308	8 033	37 475	30 914	22 541	8 502	6 561	2 475	14	12
1795	Wrecking and demolition work -----	7	87	2 040	6 588	(D)	5 823	1 372	(D)	618	(W)	(D)
1796	Installing building equipment, n.e.c. -	12	285	6 973	19 506	16 943	13 589	(D)	2 563	90	(W)	(W)
1799	Special trade contractors, n.e.c.-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
6552	Land subdividers and developers, n.e.c. -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)

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Ohio

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SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Ohio. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 76,142 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$21.1 billion in total value of business done.

Most of the 76,142 construction establishments were small. Of the total, 55,341 were nonemployers, and over half of the employer establishments had less than 5 employees. The 8,900 construction establishments with 5 employees or more, while representing only 12 percent of all establishments, accounted for more than 78 percent of the total value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$18.7 billion on total dollar value of business done. Of this amount, \$18.1 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$4.7 billion, leaving net value of construction work of \$13.4 billion. In addition, these establishments paid out \$6.1 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$8.3 billion. (See Introduction and appendices for explanation of terms.)

There were 20,801 establishments with total employment averaging 181,669 during the year. Total payroll for 1987 was \$4.1 billion. Total hours worked by construction workers during the year were 246 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 55,341 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$2.4 billion. Most of these establishments, about 78 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**
(Percent)

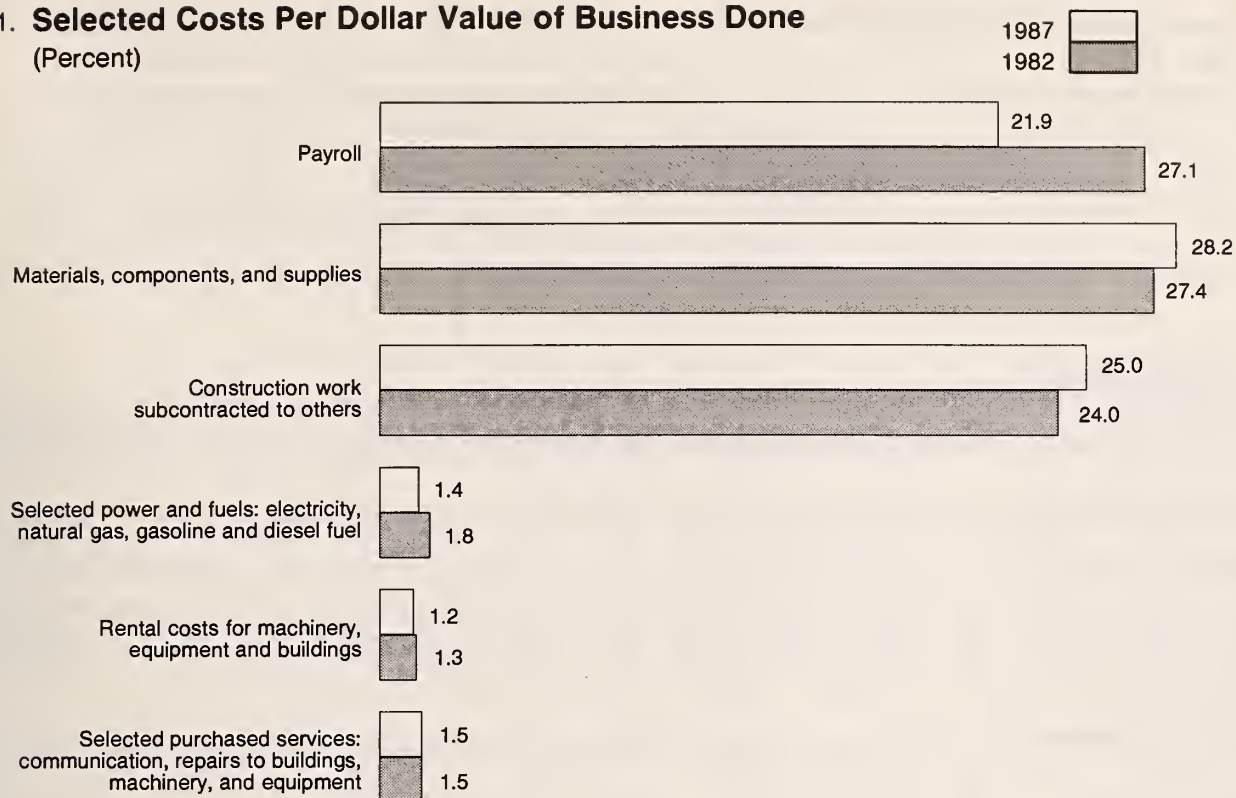


Figure 2. **Value of Construction Work by Type of Construction**
(Percent)

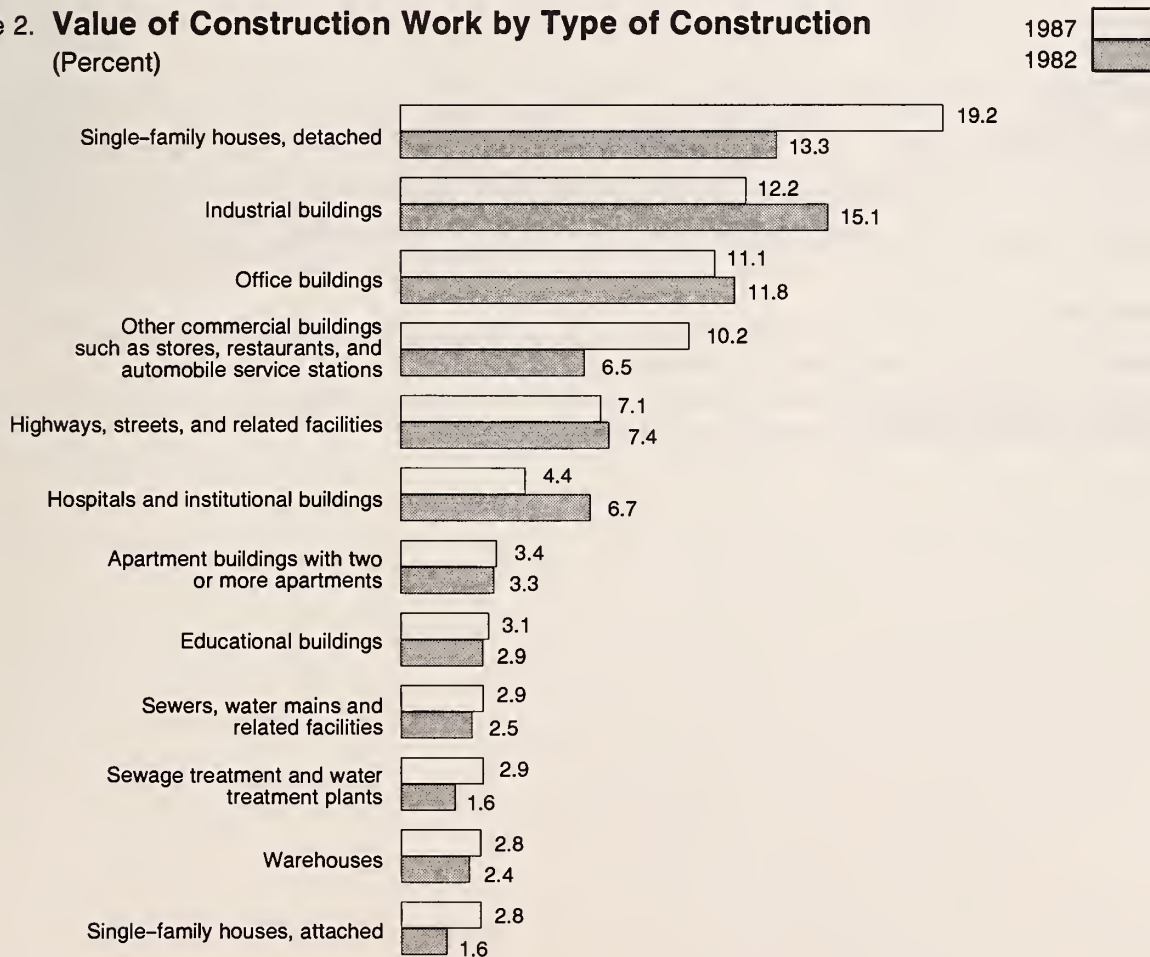


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done		Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		Number				Number			Number					
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1987													
	Construction industries and land subdividers and developers -----	76 142	60 797	181 669	21 119 999	55 341	54 814	2 399 380	20 801	5 983	181 669	18 720 619	1	1
15, 16, 17	Construction Industries -----	75 007	59 772	181 226	20 700 144	54 353	53 828	2 044 490	20 654	5 944	181 226	18 655 654	1	1
15	Building construction—General contractors and operative builders ----	16 243	11 455	43 939	8 537 189	10 423	9 849	775 701	5 820	1 606	43 939	7 761 488	1	2
16	Heavy construction other than building construction— contractors -----	1 771	811	25 890	3 242 083	582	573	51 603	1 189	238	25 890	3 190 480	1	1
17	Special trade contractors -----	56 993	47 506	111 397	8 920 872	43 348	43 406	1 217 186	13 645	4 100	111 397	7 703 686	1	1
1711	Plumbing, heating, and air-conditioning --	6 447	4 462	27 187	2 192 717	3 752	3 743	152 647	2 695	719	27 187	2 040 070	1	1
1731	Electrical work -----	4 517	3 231	16 303	1 251 763	2 904	2 873	75 965	1 613	358	16 303	1 175 798	1	1
6552	Land subdividers and developers, n.e.c.² -----	1 123	1 016	431	419 841	988	986	354 890	135	30	431	64 951	19	24
	1982													
	Construction industries and land subdividers and developers -----	57 139	45 618	151 902	11 915 940	39 061	39 074	1 214 843	18 078	6 544	151 902	10 701 097	1	1
15, 16, 17	Construction Industries -----	56 527	45 094	151 237	11 768 517	38 586	38 592	1 117 733	17 941	6 502	151 237	10 650 784	1	(W)
15	Building construction—General contractors and operative builders ----	14 120	10 826	32 892	4 144 354	9 468	9 303	434 897	4 652	1 523	32 892	3 709 457	1	1
16	Heavy construction other than building construction— contractors -----	2 111	1 275	32 102	2 223 929	1 080	1 073	92 693	1 031	202	32 102	2 131 236	1	1
17	Special trade contractors -----	40 296	32 993	86 243	5 400 234	28 038	28 216	590 143	12 258	4 777	86 243	4 810 091	1	1
1711	Plumbing, heating, and air-conditioning --	4 930	3 183	21 071	1 443 205	2 425	2 430	85 357	2 505	753	21 071	1 357 848	1	1
1731	Electrical work -----	3 630	2 710	13 140	877 105	2 334	2 322	55 306	1 296	388	13 140	821 799	1	1
6552	Land subdividers and developers, n.e.c.² -----	603	519	659	147 415	475	482	97 110	128	37	659	50 305	6	8

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

¹For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

²For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll ¹			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done ²		
	A	B	C	D	E	F	G	H	I	J	K	J	K
1987													
The State	76 142	60 797	181 669	21 119 999	55 341	54 814	2 399 380	20 801	5 983	181 669	18 720 619	1	1
\$10,000,000 or more	237	10	36 680	(D)	1	—	(D)	236	10	36 680	6 460 028	(W)	1
\$5,000,000 to \$9,999,999	338	37	17 699	8 794 221	6	9	59 217	332	28	17 699	2 274 976	1	3
\$2,500,000 to \$4,999,999	851	50	24 536	2 921 784	35	25	123 967	816	25	24 536	2 797 817	1	3
\$1,000,000 to \$2,499,999	2 193	323	32 984	3 361 464	167	138	252 123	2 026	185	32 984	3 109 341	2	2
\$500,000 to \$999,999	2 744	702	22 782	1 919 568	357	304	244 715	2 387	398	22 782	1 674 853	3	3
 \$250,000 to \$499,999	 4 202	 1 777	 19 233	 1 467 271	 870	 802	 295 207	 3 332	 975	 19 233	 1 172 064	 4	 3
\$100,000 to \$249,999	8 963	5 531	18 740	1 409 722	3 204	3 142	488 343	5 759	2 389	18 740	921 379	3	3
\$50,000 to \$99,999	(S)	(S)	(S)	(S)	5 146	5 118	360 792	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999	(S)	(S)	(S)	(S)	7 690	7 633	272 742	(S)	(S)	(S)	(S)	(S)	(S)
 Less than \$25,000	 (S)	 (S)	 (S)	 (S)	 37 865	 37 643	 302 275	 (S)	 (S)	 (S)	 (S)	 (S)	 (S)
\$10,000 to \$24,999	(NA)	(NA)	(NA)	(NA)	12 567	12 484	204 806	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999	(NA)	(NA)	(NA)	(NA)	8 180	8 134	59 551	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999	(NA)	(NA)	(NA)	(NA)	6 816	6 775	24 861	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000	(NA)	(NA)	(NA)	(NA)	10 302	10 250	13 056	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1982													
The State	57 139	45 618	151 902	11 915 940	39 061	39 074	1 214 843	18 078	6 544	151 902	10 701 097	1	1
\$10,000,000 or more	139	8	35 855	3 650 949	5	8	115 487	134	—	35 855	3 535 462	(W)	(W)
\$5,000,000 to \$9,999,999	174	5	12 814	(D)	2	2	(D)	172	3	12 814	1 166 213	(W)	(W)
\$2,500,000 to \$4,999,999	407	19	15 167	2 600 020	14	11	59 598	393	8	15 167	1 374 209	(W)	(W)
\$1,000,000 to \$2,499,999	1 096	53	23 342	1 726 961	39	36	59 813	1 057	17	23 342	1 667 148	1	2
\$500,000 to \$999,999	1 633	192	17 757	1 143 311	104	81	72 923	1 529	111	17 757	1 070 388	3	3
 \$250,000 to \$499,999	 2 678	 774	 16 575	 933 097	 277	 266	 93 809	 2 401	 508	 16 575	 839 288	 3	 3
\$100,000 to \$249,999	5 724	3 161	16 607	900 183	1 390	1 391	204 888	4 334	1 770	16 607	695 295	3	3
\$50,000 to \$99,999	6 392	4 847	7 371	451 426	3 049	3 140	208 567	3 343	1 707	7 371	242 859	4	3
\$25,000 to \$49,999	7 367	6 339	3 419	260 297	5 179	5 249	179 500	2 188	1 090	3 419	80 797	5	4
 Less than \$25,000	 31 528	 30 217	 2 991	 249 694	 29 002	 28 890	 220 258	 2 526	 1 327	 2 991	 29 436	 3	 3
\$10,000 to \$24,999	(NA)	(NA)	(NA)	(NA)	9 340	9 303	146 565	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999	(NA)	(NA)	(NA)	(NA)	6 971	6 949	47 307	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999	(NA)	(NA)	(NA)	(NA)	7 295	7 272	20 990	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500	(NA)	(NA)	(NA)	(NA)	5 396	5 366	5 396	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

¹For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

²For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	Construction industries and land subdividers and developers -----	20 801	181 669	143 254	4 094 094	3 011 320	245 757	18 095 164	13 411 631
15, 16, 17	Construction industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3 206	12 831	9 973	201 425	142 652	15 928	1 309 904	954 666
1522	Other residential buildings -----	319	3 447	2 320	65 327	41 583	3 437	437 647	227 928
1531	Operative builders -----	626	4 531	2 168	112 444	41 219	4 210	1 368 380	724 109
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	380	6 328	4 734	166 359	114 941	8 504	1 026 470	518 783
1542	Nonresidential buildings, n.e.c. -----	1 289	16 802	12 660	416 367	278 266	22 264	3 294 245	1 556 001
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	403	9 488	7 959	272 019	209 559	15 005	1 285 954	1 046 298
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	44	1 660	1 330	50 326	36 494	2 330	203 375	164 709
1623	Water, sewer, and utility lines -----	334	6 402	5 395	158 495	125 038	9 953	581 918	521 215
1629	Heavy construction, n.e.c. -----	408	8 340	6 420	228 433	165 747	10 366	996 536	704 255
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	2 695	27 187	20 692	656 291	472 245	37 593	2 017 620	1 802 511
1721	Painting and paper hanging -----	1 265	6 564	5 592	118 030	95 889	8 642	303 382	285 815
1731	Electrical work -----	1 613	16 303	12 989	423 268	333 020	23 504	1 160 626	1 126 339
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	1 099	7 347	6 549	128 914	107 941	10 135	383 660	360 256
1742	Plastering, drywall, and insulation work -----	546	7 272	6 125	160 309	128 865	10 850	453 007	419 156
1743	Terrazzo, tile, marble, and mosaic work -----	124	720	590	17 803	15 024	897	63 198	59 821
175	Carpentry and floor work:								
1751	Carpentry -----	1 385	6 433	5 478	103 787	83 049	8 785	366 700	323 556
1752	Floor laying and other floor work -----	374	1 860	1 420	37 212	26 447	2 399	142 268	130 186
1761	Roofing, siding, and sheet metal work -----	1 303	9 820	7 916	196 589	146 721	12 900	676 917	635 108
1771	Concrete work -----	1 099	10 094	8 505	200 226	159 125	13 929	732 113	661 690
1781	Water well drilling -----	102	387	295	5 805	4 699	525	26 136	25 402
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	109	2 028	1 695	55 285	40 676	2 787	138 590	131 686
1793	Glass and glazing work -----	187	1 290	916	28 177	19 511	1 668	103 405	101 246
1794	Excavation work -----	753	4 660	3 887	93 317	73 807	6 577	361 722	331 808
1795	Wrecking and demolition work -----	30	628	526	9 072	7 114	766	36 809	34 296
1796	Installing building equipment, n.e.c. -----	149	2 655	2 149	77 323	61 889	4 021	219 415	204 650
1799	Special trade contractors, n.e.c. -----	812	6 149	4 845	104 479	78 371	7 610	365 242	332 864
6552	Land subdividers and developers, n.e.c. -----	135	431	102	6 998	1 418	158	39 913	27 264

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
8 287 663	5 554 659	4 683 533	232 828	294 167	2 153 382	151 902	10 360 020	4 948 283	1	1	2	15, 16, 17
												15
513 005 148 958	466 288 90 503	355 237 209 719	10 379 3 471	17 004 8 858	105 503 67 792	10 127 1 463	678 143 153 066	268 831 43 321	3 6	5 7	8 8	152 1521 1522
375 844	(D)	644 271	4 155	8 522	124 308	2 091	294 077	81 788	5	6	12	1531
306 643 961 420	248 166 636 222	507 686 1 738 244	10 768 19 633	12 122 17 740	67 859 193 637	7 384 11 827	822 126 1 628 658	269 223 372 634	3 2	3 2	5 6	154 1541 1542
												16
601 745	484 098	239 656	28 147	45 249	314 151	6 786	683 065	295 860	3	2	7	1611
94 500 360 060 501 273	77 943 169 166 270 389	38 666 60 702 292 281	6 368 18 056 19 929	2 263 24 441 18 728	33 382 180 759 173 549	1 324 6 646 17 346	104 484 384 650 876 804	55 415 242 828 529 843	2 2 2	2 2 2	8 6 7	162 1622 1623 1629
												17
1 044 399	780 562	215 108	24 197	26 405	164 491	21 071	1 334 521	738 110	1	1	6	1711
224 404	66 688	17 566	4 915	5 620	37 251	5 116	168 199	122 101	4	3	14	1721
700 493	441 017	34 287	11 262	15 904	96 861	13 140	799 768	475 749	1	1	7	1731
236 160 276 207 33 590	125 024 160 369 26 767	23 404 33 850 3 377	5 294 6 174 419	9 422 6 360 867	38 245 28 661 5 573	4 532 5 952 481	172 837 270 288 23 153	110 049 178 959 13 105	4 3 9	4 2 9	14 9 8	174 1741 1742 1743
194 829 77 124	140 547 64 805	43 144 12 082	2 565 2 159	4 701 2 172	26 474 14 743	4 250 1 211	196 012 61 948	102 392 34 218	4 6	4 6	14 16	175 1751 1752
383 140	265 327	41 809	9 529	8 638	83 072	8 134	454 297	248 238	3	3	10	1761
402 440	269 952	70 422	13 298	19 210	130 912	6 342	323 616	177 148	3	2	8	1771
14 801	10 753	733	174	1 320	11 165	427	24 627	16 012	15	12	19	1781
96 145 53 224 244 880 32 049 162 322 225 878	40 440 53 198 97 243 3 293 49 892 (D)	6 903 2 158 29 913 2 513 14 765 32 378	3 700 1 672 14 550 1 545 4 088 5 955	1 978 1 664 24 059 1 284 2 910 6 428	12 164 8 668 130 320 11 519 31 935 51 099	2 371 1 081 5 533 402 2 645 3 555	141 943 72 334 325 564 20 590 144 078 169 884	78 589 39 253 208 368 16 220 107 364 101 476	3 5 4 3 2 5	5 5 4 1 1 5	13 19 9 10 12	179 1791 1793 1794 1795 1796 1799
22 119	*7 594	12 649	*414	*286	*9 275	659	31 281	21 177	19	29	50	6552

Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year	20 801	18 078	20 752	19 843	1	1	2	2
Proprietors and working partners	5 983	6 544	11 710	11 958	3	3	3	3
All employees**	181 669	151 902	180 454	180 537	1	1	1	1
Construction workers:								
March	121 517	102 185	120 747	122 528	1	1	1	1
May	143 971	123 536	152 756	146 523	1	1	1	1
August	159 531	132 469	166 500	169 291	1	1	1	1
November	147 997	120 012	156 233	152 558	1	1	1	1
Average	143 254	121 582	149 199	149 576	1	1	1	1
Other employees:								
March	37 432	30 134	30 086	29 551	1	1	1	2
May	38 156	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
August	39 241	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
November	38 850	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Average	38 420	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March	50 245	38 545	(NA)	(NA)	1	1	(NA)	(NA)
April to June	61 393	47 167	(NA)	(NA)	1	1	(NA)	(NA)
July to September	70 139	52 332	(NA)	(NA)	1	1	(NA)	(NA)
October to December	63 978	46 643	(NA)	(NA)	1	1	(NA)	(NA)
Total hours worked	245 757	184 687	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	4 094 094	2 902 090	2 595 614	1 978 636	(W)	(W)	(W)	1
Payroll, construction workers	3 011 320	2 210 000	2 049 643	1 595 501	(W)	(W)	(W)	1
Payroll, other employees	1 082 774	692 090	545 971	383 135	1	(W)	1	2
First quarter payroll, all employees	847 432	610 977	478 812	(NA)	1	1	(W)	(NA)
Employer costs for fringe benefits, all employees	973 184	551 765	508 952	(NA)	1	1	(W)	(NA)
Legally required expenditures	612 189	385 737	272 853	(NA)	1	1	(W)	(NA)
Voluntary expenditures	360 994	166 027	236 099	(NA)	1	1	(W)	(NA)
Dollar value of business done	18 720 619	10 701 097	9 893 166	7 185 627	1	1	1	1
Value of construction work ¹	18 095 164	10 360 020	9 530 951	6 968 246	1	1	1	1
Value of construction work subcontracted in from others	4 080 286	2 376 619	2 094 606	1 501 325	1	1	1	1
Land receipts ²	194 763	59 464	(NA)	(NA)	6	4	(NA)	(NA)
Other business receipts	430 691	281 612	362 216	217 381	3	1	1	11
Net value of construction†	13 411 631	7 792 679	7 384 737	5 145 634	1	1	1	1
Value added††	8 287 663	4 948 283	4 393 828	3 110 980	1	(W)	(W)	1
Selected costs	10 238 192	5 693 350	5 377 010	3 988 695	1	1	1	1
Materials, components, and supplies ³	5 288 495	2 932 454	3 080 198	2 166 083	1	1	1	2
Construction work subcontracted to others	4 683 533	2 567 341	2 146 214	1 822 612	1	1	1	2
Selected power, fuels, and lubricants	266 164	193 554	150 598	(NA)	1	1	1	(NA)
Electricity	37 891	25 428	18 551	(NA)	2	1	1	(NA)
Natural gas	13 170	11 652	9 691	(NA)	1	1	1	(NA)
Gasoline and diesel fuel	197 115	142 730	103 260	(NA)	2	2	2	(NA)
On highway use	142 292	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Off highway use	54 823	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Other, including lubricating oils and greases	17 986	13 743	19 102	(NA)	3	2	2	(NA)
Rental cost for machinery, equipment, and buildings	232 828	135 502	116 771	(NA)	1	1	1	(NA)
For machinery and equipment	157 186	95 172	92 367	89 077	2	1	1	3
For buildings	75 642	40 329	24 404	(NA)	2	2	1	(NA)
Selected purchased services	282 514	164 574	155 797	(NA)	1	1	1	(NA)
Communication services	75 385	48 964	39 079	(NA)	2	1	1	(NA)
Repairs to buildings and other structures	16 884	10 662	8 651	(NA)	4	2	3	(NA)
Repairs to machinery and equipment	190 244	104 948	108 058	(NA)	1	1	1	(NA)
Ownership of construction projects:								
Value of construction work	18 095 164	10 360 020	9 530 951	6 968 246	1	1	1	1
Government owned	3 852 064	2 249 975	2 014 716	1 857 456	1	1	1	2
Federal	788 913	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
State and local	3 063 151	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Privately owned	14 243 100	8 110 044	7 516 235	5 110 790	1	1	1	1

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

²Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

³For 1972, includes data for power, fuels, and lubricants.

Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 938 881	1 868 983	3	1
Capital expenditures, other than land -----	294 167	154 890	2	2
New -----	221 791	111 541	2	2
Used -----	72 376	43 349	4	3
Retirements and disposition of depreciable assets -----	79 667	83 907	4	3
End-of-year gross book value of depreciable assets -----	2 153 382	1 939 966	3	1
Depreciation charges during year -----	244 305	221 105	3	1
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	474 577	333 964	10	2
Capital expenditures, other than land -----	36 652	24 093	5	3
New buildings and other structures -----	24 214	17 853	5	4
Used buildings and other structures -----	12 438	6 240	9	7
Retirements and disposition of depreciable assets -----	15 042	14 323	13	6
End-of-year gross book value of depreciable assets -----	496 187	343 734	10	2
Depreciation charges during year -----	32 693	28 121	5	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	1 464 304	1 535 018	1	1
Capital expenditures, other than land -----	257 515	130 797	2	2
New machinery and equipment, including automobiles and trucks -----	197 577	93 688	2	2
New automobiles and trucks, intended primarily for highway use -----	90 321	37 207	3	3
Used machinery and equipment, including automobiles and trucks -----	59 938	37 109	4	4
Retirements and disposition of depreciable assets -----	64 624	69 584	4	2
End-of-year gross book value of depreciable assets -----	1 657 194	1 596 232	1	1
Depreciation charges during year -----	211 612	192 983	3	1

Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	20 801	1
Value of construction work	18 095 164	1
Establishments with inventories:		
Number	7 449	2
Value of construction work	9 208 300	2
Inventories¹:		
End of 1987, materials and supplies	208 307	5
End of 1986, materials and supplies	195 271	5
Establishments with no inventories:		
Number	10 305	2
Value of construction work	6 232 241	2
Establishments not reporting:		
Number	3 047	4
Value of construction work	2 654 623	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1987										
Number of establishments	20 801	11 899	4 607	2 472	1 351	309	130	24	4	3
All employees**	181 669	23 011	29 560	32 488	39 203	20 741	18 752	8 073	2 779	7 060
Payroll, all employees	4 094 094	335 886	519 968	674 800	972 773	565 795	539 792	227 524	71 871	185 684
Construction worker hours (thousands)	245 757	29 150	36 556	43 402	54 417	29 978	28 021	11 196	4 074	8 960
Dollar value business done	18 720 619	2 141 652	2 313 302	2 955 219	4 020 830	2 581 322	2 570 895	1 221 269	303 870	612 258
Value of construction work ¹	18 095 164	2 052 181	2 220 816	2 873 589	3 890 582	2 494 284	2 522 100	1 207 198	834 413	(D)
Net value of construction work†	13 411 631	1 598 464	1 782 050	2 285 396	3 001 477	1 755 466	1 590 716	808 729	197 600	391 731
Value added††	8 287 663	890 232	1 065 602	1 406 241	1 875 144	1 096 947	981 959	538 971	134 212	298 354
Cost of materials, components, supplies, and fuels	5 554 659	739 743	769 762	936 818	1 210 626	1 375 399	(D)	283 829	238 480	(D)
Cost of construction work subcontracted to others	4 683 533	453 717	438 766	588 192	889 104	738 818	931 384	398 469	245 082	(D)
Rental cost for machinery, equipment, and buildings	232 828	20 764	23 916	38 291	54 278	37 549	31 035	11 679	7 091	8 224
Capital expenditures, other than land	294 167	34 640	41 579	53 887	67 172	28 421	39 577	13 081	15 808	(D)
End-of-year gross book value of depreciable assets	2 153 382	334 428	302 220	376 329	440 008	202 733	263 705	141 527	92 429	(D)
1982										
All employees**	151 902	22 935	21 146	23 517	28 865	14 948	15 314	8 081	17 095	(D)
Value of construction work ¹	10 360 020	1 133 058	1 128 914	1 563 058	2 168 475	1 352 905	1 483 982	758 368	188 853	582 406
Value added††	4 948 283	541 280	566 194	759 275	1 075 478	633 328	506 460	330 863	127 560	407 843
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	1	2	3	2	1	(W)	(W)	(W)	(W)	(W)
Net value of construction work†	1	3	3	2	1	(W)	(W)	(W)	(W)	(W)
Capital expenditures, other than land	2	7	8	5	3	1	6	(W)	(W)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1987											
Number of establishments	20 801	(S)	(S)	(S)	5 759	3 332	2 387	2 026	816	332	236
All employees**	181 669	(S)	(S)	(S)	18 740	19 233	22 782	32 984	24 536	17 699	36 680
Payroll, all employees	4 094 094	(S)	(S)	(S)	247 041	322 363	449 557	748 768	642 301	489 332	1 111 749
Construction worker hours (thousands)	245 757	(S)	(S)	(S)	22 831	25 616	31 226	44 044	34 781	25 313	51 675
Dollar value of business done	18 720 619	(S)	(S)	(S)	921 379	1 172 064	1 674 853	3 109 341	2 797 817	2 274 976	6 460 028
Value of construction work ¹	18 095 164	(S)	(S)	(S)	907 185	1 150 271	1 621 755	3 002 666	2 712 386	2 176 368	6 218 960
Net value of construction work†	13 411 631	(S)	(S)	(S)	828 930	1 022 936	1 413 199	2 451 759	2 078 802	1 581 680	3 744 411
Value added††	8 287 663	(S)	(S)	(S)	502 282	614 178	862 475	1 483 754	1 293 040	980 983	2 369 401
Cost of materials, components, supplies, and fuels	5 554 659	(S)	(S)	(S)	336 328	425 654	593 352	1 032 708	837 487	661 404	1 555 678
Cost of construction work subcontracted to others	4 683 533	(S)	(S)	(S)	78 255	127 335	208 556	550 907	633 583	594 687	2 474 548
Rental cost for machinery, equipment, and buildings	232 828	(S)	(S)	(S)	11 387	15 240	22 153	42 544	39 544	27 990	70 818
Capital expenditures, other than land	294 167	(S)	(S)	(S)	22 002	25 882	36 889	58 090	39 629	26 904	78 592
End-of-year gross book value of depreciable assets	2 153 382	(S)	(S)	(S)	154 943	169 327	260 686	420 954	328 257	224 153	538 081
1982											
All employees**	151 902	2 991	3 419	7 371	16 607	16 575	17 757	23 342	15 167	12 814	35 855
Value of construction work ¹	10 360 020	28 998	80 105	239 450	680 892	814 136	1 040 933	1 618 558	1 339 360	1 131 879	3 385 707
Value added††	4 948 283	15 968	40 231	133 030	361 907	434 266	537 557	834 330	657 202	540 938	1 392 850
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	1	(S)	(S)	(S)	3	4	3	2	1	1	(W)
Net value of construction work†	1	(S)	(S)	(S)	3	4	3	2	2	2	1
Capital expenditures, other than land	2	(S)	(S)	(S)	9	10	7	5	4	3	3

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work ¹				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction ²	Maintenance and repair				
	A	B	C	D	A	B	C	D
1987								
Value of construction work ¹	18 095 164	11 156 862	3 881 089	2 322 103	1	1	1	1
Building construction	13 340 421	8 804 556	2 947 718	1 562 163	1	1	1	2
Single-family houses.....	3 976 182	2 852 575	684 915	438 691	3	3	3	4
Single-family houses, detached.....	3 474 082	2 450 001	630 951	393 129	2	3	4	4
Single-family houses, attached.....	502 099	402 573	53 963	45 562	10	12	13	11
Apartment buildings with two or more apartments.....	622 168	496 465	62 220	63 482	7	8	8	8
Other residential buildings, including hotels and motels.....	306 711	203 247	63 622	39 841	6	8	8	6
Hotels and motels.....	166 335	124 288	26 519	15 528	8	11	8	6
Other residential buildings, excluding hotels and motels.....	140 375	78 958	37 103	24 313	8	11	12	9
Office buildings.....	2 005 901	1 380 765	451 826	173 310	1	2	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations.....	1 847 908	1 190 760	430 711	226 435	2	2	3	3
Industrial buildings and warehouses.....	2 715 059	1 598 674	692 161	424 224	1	1	2	3
Industrial buildings.....	2 207 728	1 210 676	620 504	376 547	1	1	2	3
Warehouses.....	507 331	387 998	71 656	47 676	2	3	4	4
Religious buildings.....	161 353	78 927	53 766	28 660	3	5	5	6
Educational buildings.....	567 867	332 689	171 151	64 027	2	3	3	4
Hospitals and institutional buildings.....	786 635	456 015	268 994	61 625	1	2	3	3
Farm buildings.....	66 977	44 334	9 889	12 752	12	17	13	12
Amusement, social, and recreational buildings.....	110 072	76 872	24 886	8 313	4	4	8	7
Other nonresidential buildings.....	147 603	93 233	33 577	20 803	6	4	10	30
Land development for buildings.....	25 985	(NA)	(NA)	(NA)	17	(NA)	(NA)	(NA)
Nonbuilding construction	4 045 619	2 352 306	933 371	759 942	1	1	1	2
Highways, streets, and related facilities.....	1 275 456	621 657	272 953	380 845	2	2	2	3
Parking areas including private driveways.....	210 987	138 663	31 476	40 848	5	5	7	10
Bridges, tunnels, and elevated highways.....	273 424	143 641	95 170	34 612	2	1	1	13
Tunnels.....	9 081	7 199	777	1 104	1	(W)	1	(W)
Bridges and elevated highways.....	264 343	136 442	94 393	33 507	2	1	1	13
Power and communication transmission lines, towers, and related facilities.....	119 230	87 346	12 303	19 580	5	4	15	14
Sewers, water mains, and related facilities.....	525 899	360 559	122 289	43 050	3	4	4	5
Sewers, sewer lines, and related facilities.....	362 041	263 206	69 287	29 547	3	3	4	5
Water mains and related facilities.....	163 858	97 353	53 001	13 503	5	7	5	8
Pipeline, other than sewer or water lines.....	110 061	70 937	25 358	17 665	4	5	2	3
Blast furnaces, petroleum refineries, and chemical complexes.....	138 209	43 406	39 074	55 728	2	2	3	1
Power plants.....	403 913	223 196	117 803	62 913	1	2	3	2
Sewage treatment and water treatment plants.....	522 295	383 850	115 933	22 512	2	2	3	6
Sewage treatment plants.....	372 001	273 377	84 245	14 378	1	2	2	9
Water treatment plants.....	150 294	110 472	31 687	8 133	5	5	8	2
Other nonbuilding construction.....	466 145	279 051	101 012	86 089	7	7	19	12
Construction work, n.s.k.	709 124	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
1982								
Value of construction work ¹	10 360 020	7 842 378	(NA)	2 517 641	1	1	(NA)	1
Building construction	7 061 807	5 459 882	(NA)	1 601 925	(W)	1	(NA)	1
Single-family houses.....	1 544 402	1 104 766	(NA)	439 636	2	2	(NA)	2
Single-family houses, detached.....	1 373 974	964 176	(NA)	409 797	2	2	(NA)	2
Single-family houses, attached.....	170 428	140 589	(NA)	29 838	5	6	(NA)	7
Apartment buildings with two or more apartments.....	337 268	263 774	(NA)	73 494	2	2	(NA)	4
Other residential buildings, including hotels and motels.....	133 121	110 485	(NA)	22 635	2	3	(NA)	8
Office buildings.....	1 226 563	973 108	(NA)	253 455	1	1	(NA)	1
Other commercial buildings such as stores, restaurants, and automobile service stations.....	674 454	535 593	(NA)	138 860	2	3	(NA)	3
Industrial buildings and warehouses.....	1 814 939	1 391 577	(NA)	423 361	1	1	(NA)	1
Industrial buildings.....	1 563 149	1 187 701	(NA)	375 447	1	1	(NA)	1
Warehouses.....	251 790	203 876	(NA)	47 913	2	2	(NA)	4
Religious buildings.....	119 611	88 645	(NA)	30 966	5	5	(NA)	5
Educational buildings.....	300 502	213 139	(NA)	87 363	1	1	(NA)	4
Hospitals and institutional buildings.....	693 397	597 627	(NA)	95 770	1	1	(NA)	2
Farm buildings.....	82 424	68 672	(NA)	13 751	4	5	(NA)	7
Amusement, social, and recreational buildings.....	66 605	58 702	(NA)	7 902	4	4	(NA)	10
Other nonresidential buildings.....	68 521	53 794	(NA)	14 732	5	4	(NA)	10
Nonbuilding construction	2 698 422	1 907 983	(NA)	790 439	1	1	(NA)	1
Highways, streets, and related facilities.....	762 610	416 795	(NA)	345 814	1	1	(NA)	3
Bridges, tunnels, and elevated highways.....	185 597	117 058	(NA)	68 539	1	1	(NA)	2
Power and communication transmission lines, towers, and related facilities.....	141 370	107 790	(NA)	33 579	3	3	(NA)	5
Sewers, water mains, and related facilities.....	262 000	228 890	(NA)	33 110	2	1	(NA)	4
Sewers, sewer lines, and related facilities.....	185 067	165 378	(NA)	19 688	2	2	(NA)	5
Water mains and related facilities.....	76 933	63 511	(NA)	13 421	3	4	(NA)	5
Pipeline, other than sewer or water lines.....	109 485	87 890	(NA)	21 594	3	4	(NA)	3
Mass transit construction.....	56 209	41 218	(NA)	14 990	2	1	(NA)	6
Blast furnaces, petroleum refineries, and chemical complexes.....	243 708	156 710	(NA)	86 997	1	(W)	(NA)	2
Power plants.....	571 385	457 460	(NA)	113 925	(W)	(W)	(NA)	(W)
Power plants, nuclear.....	116 297	101 263	(NA)	15 034	(W)	(W)	(NA)	(W)
Power plants, except nuclear.....	455 087	356 197	(NA)	98 890	(W)	(W)	(NA)	(W)
Sewage treatment and water treatment plants.....	193 532	181 130	(NA)	12 402	3	3	(NA)	7
Sewage treatment plants.....	114 039	107 905	(NA)	6 134	4	4	(NA)	9
Water treatment plants.....	79 492	73 225	(NA)	6 267	2	2	(NA)	9
Other nonbuilding construction.....	172 526	113 042	(NA)	59 489	4	6	(NA)	5
Construction work, n.s.k.	599 789	474 512	(NA)	125 276	3	3	(NA)	4

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

²In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".

Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
		A	B	C	D	E	F	G
	Construction industries and land subdividers and developers -----	20 801	143 254	245 757	121 517	50 245	143 971	61 393
15, 16, 17	Construction industries:							
15	Building construction—General contractors and operative builders:							
152	General contractors, residential buildings:							
1521	Single-family houses -----	3 206	9 973	15 928	8 838	3 272	10 160	4 153
1522	Other residential buildings -----	319	2 320	3 437	2 475	896	2 264	796
1531	Operative builders -----	626	2 168	4 210	2 038	952	2 186	1 057
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	380	4 734	8 504	4 148	1 878	4 663	2 078
1542	Nonresidential buildings, n.e.c. -----	1 289	12 660	22 264	11 204	4 851	12 139	5 370
16	Heavy construction other than building construction—contractors:							
1611	Highway and street construction -----	403	7 959	15 005	4 168	1 803	8 720	3 957
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	44	1 330	2 330	950	394	1 527	634
1623	Water, sewer, and utility lines -----	334	5 395	9 953	4 447	1 943	5 401	2 479
1629	Heavy construction, n.e.c. -----	408	6 420	10 366	5 401	1 951	6 803	2 772
17	Special trade contractors:							
1711	Plumbing, heating, and air-conditioning ----	2 695	20 692	37 593	19 347	8 547	20 026	8 973
1721	Painting and paper hanging -----	1 265	5 592	8 642	4 204	1 702	5 908	2 265
1731	Electrical work -----	1 613	12 989	23 504	12 190	5 363	12 051	5 494
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	1 099	6 549	10 135	5 182	1 839	6 640	2 582
1742	Plastering, drywall, and insulation work --	546	6 125	10 850	5 766	2 474	6 106	2 666
1743	Terrazzo, tile, marble, and mosaic work --	124	590	897	616	244	590	227
175	Carpentry and floor work:							
1751	Carpentry -----	1 385	5 478	8 785	4 896	1 957	5 517	2 148
1752	Floor laying and other floor work -----	374	1 420	2 399	1 445	556	1 361	583
1761	Roofing, siding, and sheet metal work -----	1 303	7 916	12 900	6 024	2 368	7 788	3 131
1771	Concrete work -----	1 099	8 505	13 929	5 761	2 232	9 052	3 768
1781	Water well drilling -----	102	295	525	256	106	303	130
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	109	1 695	2 787	1 489	606	1 735	684
1793	Glass and glazing work -----	187	916	1 668	833	371	944	396
1794	Excavation work -----	753	3 887	6 577	3 178	1 252	4 054	1 732
1795	Wrecking and demolition work -----	30	526	766	557	188	504	190
1796	Installing building equipment, n.e.c. -----	149	2 149	4 021	2 118	972	2 124	983
1799	Special trade contractors, n.e.c. -----	812	4 845	7 610	3 908	1 500	5 284	2 096
6552	Land subdividers and developers, n.e.c. --	135	102	158	66	18	109	36

¹Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
159 531	70 139	147 997	63 978	1	1	1	1	1	1	1	1	1	1	15, 16, 17
														15
10 961 2 294	4 463 846	9 932 2 246	4 039 897	3 7	4 9	4 9	5 13	3 7	4 9	4 7	4 10	4 7	5 11	152 1521 1522
2 303	1 152	2 146	1 048	7	9	7	9	7	9	7	9	8	9	1531
														154
5 226 13 936	2 330 6 106	4 900 13 363	2 216 5 937	3 2	5 3	3 2	5 3	3 2	5 3	3 3	5 3	3 2	5 3	1541 1542
														16
10 339	5 216	8 613	4 027	3	3	3	3	3	3	3	3	3	3	1611
														162 1622
1 566 5 946 7 096	754 2 806 3 176	1 277 5 787 6 380	546 2 724 2 465	3 2 2	4 3 3	1 2 2	3 3 3	3 2 2	4 3 3	4 2 2	6 3 3	2 2 2	4 3 3	1623 1629
														17
22 374	10 389	21 021	9 683	1	2	1	2	1	2	2	3	1	2	1711
6 863	2 580	5 394	2 094	4	5	5	6	4	5	4	5	4	5	1721
13 781	6 246	13 936	6 399	1	2	2	2	2	2	2	2	2	2	1731
														174
7 658 6 396 602	3 074 2 962 216	6 718 6 242 553	2 638 2 747 210	4 3 9	5 4 4	5 3 8	5 4 4	4 3 8	5 4 5	4 3 9	6 4 4	4 3 10	6 4 6	1741 1742 1743
5 923 1 439	2 362 622	5 576 1 434	2 316 636	4 7	6 9	4 6	6 9	4 7	6 9	4 8	6 10	4 9	6 10	175 1751 1752
9 089	3 817	8 764	3 582	3	4	3	4	3	4	3	4	3	4	1761
9 971	4 274	9 246	3 654	3	4	3	4	3	4	3	4	3	4	1771
336	154	286	133	14	9	16	13	13	9	13	7	14	9	1781
														179
1 854 930 4 366 520 2 205 5 419	779 437 1 928 196 1 035 2 151	1 702 959 3 949 521 2 152 4 780	716 464 1 664 190 1 030 1 862	3 6 4 3 2 5	5 7 6 4 4 7	3 6 5 4 2 5	5 8 6 4 3 7	3 5 4 3 2 6	4 7 6 4 4 7	3 6 4 2 3 5	6 8 6 4 5 7	3 7 5 2 5 5	6 8 6 4 2 7	1791 1793 1794 1795 1796 1799
127	*53	*106	*50	34	40	36	37	34	37	37	44	41	53	6552

Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees* per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	Construction industries and land subdividers and developers -----	8.7	22.5	1 715.5	126.3	.226	.307	.259	.013
15, 16, 17	Construction industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.0	15.7	1 597.1	131.3	.154	.356	.271	.008
1522	Other residential buildings -----	10.8	19.0	1 481.5	188.6	.149	.207	.479	.008
1531	Operative builders -----	7.2	24.8	(S)	631.2	.082	(D)	.471	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	16.7	26.3	1 796.4	216.8	.162	.242	.495	.010
1542	Nonresidential buildings, n.e.c. -----	13.0	24.8	1 758.6	260.2	.126	.193	.528	.006
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	23.5	28.7	1 885.3	161.6	.212	.376	.186	.022
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	37.7	30.3	1 751.9	152.9	.247	.383	.190	.031
1623	Water, sewer, and utility lines -----	19.2	24.8	1 844.9	107.9	.272	.291	.104	.031
1629	Heavy construction, n.e.c. -----	20.4	27.4	1 614.6	155.2	.229	.271	.293	.020
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	10.1	24.1	1 816.8	97.5	.325	.387	.107	.012
1721	Painting and paper hanging -----	5.2	18.0	1 545.4	54.3	.389	.220	.058	.016
1731	Electrical work -----	10.1	26.0	1 809.5	89.4	.365	.380	.030	.010
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6.7	17.5	1 547.6	58.6	.336	.326	.061	.014
1742	Plastering, drywall, and insulation work -----	13.3	22.0	1 771.4	74.0	.354	.354	.075	.014
1743	Terrazzo, tile, marble, and mosaic work -----	5.8	24.7	1 520.3	107.1	.282	.424	.053	.007
175	Carpentry and floor work:								
1751	Carpentry -----	4.6	16.1	1 603.7	66.9	.283	.383	.118	.007
1752	Floor laying and other floor work -----	5.0	20.0	1 689.4	100.2	.262	.456	.085	.015
1761	Roofing, siding, and sheet metal work -----	7.5	20.0	1 629.6	85.5	.290	.392	.062	.014
1771	Concrete work -----	9.2	19.8	1 637.7	86.1	.273	.369	.096	.018
1781	Water well drilling -----	3.8	15.0	1 779.7	88.6	.222	.411	.028	.007
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	18.6	27.3	1 644.2	81.8	.399	.292	.050	.027
1793	Glass and glazing work -----	6.9	21.8	1 821.0	112.9	.272	.514	.021	.016
1794	Excavation work -----	6.2	20.0	1 692.1	93.1	.258	.269	.083	.040
1795	Wrecking and demolition work -----	20.9	14.4	1 456.3	70.0	.246	.089	.068	.042
1796	Installing building equipment, n.e.c. -----	17.8	29.1	1 871.1	102.1	.352	.227	.067	.019
1799	Special trade contractors, n.e.c. -----	7.6	17.0	1 570.7	75.4	.286	(D)	.089	.016
6552	Land subdividers and developers, n.e.c. -----	3.2	16.2	1 549.0	391.3	.175	*,190	.317	*,010

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CINCINNATI-HAMILTON, OH-KY- IN CMSA											
	Construction Industries and land subdividers and developers	3 752	36 829	791 884	3 628 799	2 554 973	1 542 067	1 088 896	1 073 826	58 041	1	1
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	516	2 452	38 502	266 254	187 782	94 866	102 028	78 473	3 324	7	11
1522	Other residential buildings	73	377	6 628	36 418	21 528	11 027	13 378	14 890	*516	19	15
1531	Operative builders	168	1 630	40 069	491 133	239 320	109 864	145 860	251 813	9 263	11	9
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	95	1 224	31 380	233 041	98 818	58 461	48 473	134 222	2 374	7	8
1542	Nonresidential buildings, n.e.c.	227	3 675	81 186	662 884	248 693	153 773	99 550	414 191	2 790	5	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	70	1 698	47 396	233 754	182 597	103 352	86 463	51 157	7 190	3	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	31	597	13 751	59 735	52 300	30 017	22 673	7 434	2 953	3	6
1629	Heavy construction, n.e.c.	52	1 043	28 486	90 915	81 897	56 185	26 078	9 018	2 088	5	5
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	514	4 660	111 391	370 344	333 469	192 868	143 390	36 874	6 395	3	2
1721	Painting and paper hanging	243	1 379	22 404	59 400	57 490	47 824	(D)	1 910	549	7	11
1731	Electrical work	320	2 979	67 427	195 503	191 374	113 507	81 064	4 130	2 160	3	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	190	1 611	26 892	75 298	72 964	49 651	23 323	2 335	1 763	8	6
1742	Plastering, drywall, and insulation work	137	1 862	40 387	108 216	99 942	59 651	41 984	8 274	1 908	10	6
1743	Terrazzo, tile, marble, and mosaic work	35	131	3 166	11 687	11 295	5 905	5 692	392	95	12	10
175	Carpentry and floor work:											
1751	Carpentry	253	1 447	21 253	63 421	57 155	35 190	26 532	6 266	487	11	8
1752	Floor laying and other floorwork	54	493	10 560	38 357	37 714	22 752	16 444	643	655	11	6
1761	Roofing, siding, and sheet metal work	181	1 721	30 311	107 516	101 842	61 243	42 209	5 675	908	5	4
1771	Concrete work	183	3 252	71 392	221 175	198 721	123 033	77 740	22 454	4 215	3	2
1781	Water well drilling	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	23	509	10 508	28 505	26 562	21 062	(D)	1 943	366	4	3
1793	Glass and glazing work	40	268	5 251	18 666	18 537	10 064	8 712	129	308	15	14
1794	Excavation work	116	890	16 670	61 741	59 481	50 986	10 697	2 259	4 496	9	8
1795	Wrecking and demolition work	9	(D)	(D)	(D)	(D)	(D)	1 556	(D)	(D)	(D)	(W)
1796	Installing building equipment, n.e.c.	37	1 073	36 365	82 002	76 894	57 547	20 828	5 108	507	2	3
1799	Special trade contractors, n.e.c.	142	1 261	22 072	70 664	67 440	48 364	21 293	3 224	1 882	11	10
6552	Land subdividers and developers, n.e.c.	38	(D)	(D)	10 642	4 663	3 090	*1 747	5 979	(D)	(D)	38
	CINCINNATI, OH-KY-IN PMSA											
	Construction Industries and land subdividers and developers	3 141	30 460	652 671	3 080 465	2 119 991	1 268 913	910 966	960 474	48 608	1	1
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	417	2 054	33 083	218 713	158 841	80 810	85 370	59 873	2 677	8	12
1522	Other residential buildings	64	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders	136	1 295	33 496	406 837	189 067	78 829	120 087	217 771	8 939	8	9
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	84	1 035	26 653	(D)	88 855	52 377	(D)	(D)	(D)	7	9
1542	Nonresidential buildings, n.e.c.	197	3 359	74 867	626 942	229 698	142 841	90 783	397 245	2 348	5	4

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CINCINNATI, OH-KY-IN PMSA— Con.											
15,16, 17 16	Construction industries and land subdividers and developers—Con. Construction industries—Con. Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	56	1 231	34 800	187 970	143 096	78 391	(D)	44 874	5 381	5	4
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	27	528	12 089	(D)	46 365	26 349	(D)	(D)	(D)	4	7
1629	Heavy construction, n.e.c. -----	45	736	20 097	71 714	63 446	43 305	(D)	8 268	(D)	6	6
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning -----	438	4 280	102 857	340 828	305 707	177 902	(D)	35 120	6 112	3	2
1721	Painting and paper hanging-----	208	1 152	18 794	51 551	49 730	41 149	(D)	1 821	378	9	13
1731	Electrical work -----	254	2 551	58 272	163 403	160 103	95 801	(D)	3 300	1 855	3	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	159	1 307	20 760	54 782	52 582	35 676	16 917	2 200	(D)	10	6
1742	Plastering, drywall, and insulation work -----	119	1 649	36 497	97 140	89 955	53 992	(D)	7 185	1 815	11	7
1743	Terrazzo, tile, marble, and mosaic work -----	28	122	3 063	11 238	(D)	5 621	5 530	(D)	(D)	13	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	228	1 319	19 397	58 795	52 914	32 790	24 157	5 881	362	12	9
1752	Floor laying and other floorwork-----	38	407	9 496	34 993	34 466	20 492	15 456	527	439	10	6
1761	Roofing, siding, and sheet metal work -----	151	1 500	26 908	93 662	88 977	53 808	36 576	4 686	820	4	4
1771	Concrete work -----	160	1 561	29 394	101 086	(D)	52 769	(D)	(D)	2 038	6	(D)
1781	Water well drilling -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	18	307	4 864	13 225	11 899	9 492	(D)	1 326	(D)	8	7
1793	Glass and glazing work -----	37	248	4 861	16 912	(D)	9 103	7 927	(D)	(D)	16	(D)
1794	Excavation work -----	78	711	13 760	52 961	50 835	44 148	8 863	2 126	4 134	9	9
1795	Wrecking and demolition work -----	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -	34	(D)	35 909	80 526	(D)	56 552	20 553	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c. -----	123	1 190	21 181	67 983	64 792	46 344	(D)	3 191	(D)	11	10
6552	Land subdividers and developers, n.e.c. -----	*32	*77	1 461	*7 732	*3 302	*2 029	(D)	4 430	*55	46	56
	HAMILTON-MIDDLETOWN, OH PMSA											
	Construction industries and land subdividers and developers -----	611	6 369	139 213	548 334	434 982	273 155	177 929	113 353	9 433	3	3
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	100	397	5 419	47 541	28 941	14 056	16 658	18 600	*647	18	23
1522	Other residential buildings -----	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders -----	32	*336	6 573	84 296	50 253	31 035	25 773	34 043	*324	41	25
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	*11	190	4 727	(D)	9 963	6 084	(D)	(D)	(D)	23	6
1542	Nonresidential buildings, n.e.c. -----	30	316	6 319	35 942	18 995	10 933	8 767	16 947	442	23	18
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	14	467	12 596	45 784	39 501	24 961	(D)	6 283	1 809	(W)	(W)
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1623	Water, sewer, and utility lines -----	4	70	1 662	(D)	5 935	3 668	(D)	(D)	(D)	(W)	(W)
1629	Heavy construction, n.e.c. -----	7	308	8 389	19 201	18 451	12 880	(D)	750	(D)	9	12

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

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1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	HAMILTON-MIDDLETOWN, OH PMSA—Con.											
	Construction industries and land subdividers and developers—Con. Construction Industries—Con.											
15,16, 17 17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	76	380	8 534	29 516	27 762	14 965	(D)	1 754	283	11	10
1721	Painting and paper hanging	35	226	3 611	7 849	7 760	6 675	1 085	89	171	14	12
1731	Electrical work	66	428	9 156	32 100	31 271	17 706	(D)	830	306	6	11
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	31	304	6 132	20 516	20 381	13 975	6 406	135	(D)	14	11
1742	Plastering, drywall, and insulation work	18	213	3 890	11 076	9 986	5 660	(D)	1 090	93	10	12
1743	Terrazzo, tile, marble, and mosaic work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
175	Carpentry and floor work:											
1751	Carpentry	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floorwork	*16	*86	*1 064	*3 364	*3 248	*2 260	*988	*116	(S)	62	57
1761	Roofing, siding, and sheet metal work	30	221	3 403	13 854	12 865	7 435	5 633	*989	*88	27	18
1771	Concrete work	24	1 691	41 998	120 089	(D)	70 264	(D)	(D)	2 177	2	(D)
1781	Water well drilling	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	5	201	5 644	15 280	(D)	11 570	(D)	(D)	(D)	(W)	(D)
1793	Glass and glazing work	3	20	390	1 754	(D)	961	785	(D)	(D)	(W)	(D)
1794	Excavation work	38	179	2 910	8 780	8 647	6 839	1 834	*133	*363	25	25
1795	Wrecking and demolition work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ..	3	(D)	456	1 476	(D)	995	275	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	19	71	*891	*2 681	*2 648	*2 020	(D)	33	(D)	40	43
6552	Land subdividers and developers, n.e.c.	6	17	336	2 910	1 361	1 061	(D)	1 549	-	8	8
	CLEVELAND-AKRON-LORAIN, OH CMSA											
	Construction industries and land subdividers and developers	5 225	46 603	1 131 489	4 708 653	3 456 875	2 223 105	1 371 908	1 251 779	66 229	1	1
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	800	3 302	59 785	388 679	270 061	148 446	127 329	118 619	5 375	6	10
1522	Other residential buildings	86	850	14 744	81 611	52 027	30 893	22 371	29 583	*209	13	11
1531	Operative builders	110	946	22 056	220 935	117 928	54 086	72 822	103 007	966	9	11
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	80	1 553	38 989	168 548	95 876	63 663	38 843	72 672	1 066	5	7
1542	Nonresidential buildings, n.e.c.	328	3 508	98 387	829 075	364 214	213 321	164 517	464 862	5 043	4	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	92	2 162	61 772	301 888	234 712	124 734	114 689	67 176	9 086	10	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	9	716	24 194	95 619	78 425	43 893	(D)	17 194	392	4	3
1623	Water, sewer, and utility lines	106	1 263	33 918	128 422	114 756	77 058	38 274	13 665	4 091	6	5
1629	Heavy construction, n.e.c.	78	3 502	106 527	446 964	(D)	232 039	81 220	(D)	4 531	2	(D)

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CLEVELAND-AKRON-LORAIN, OH CMSA—Con.											
	Construction industries and land subdividers and developers—Con. Construction Industries—Con.											
15,16, 17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	709	5 631	140 269	456 261	395 184	237 985	162 049	61 077	5 679	3	3
1721	Painting and paper hanging	357	1 874	39 623	96 557	91 708	74 230	20 136	4 849	1 628	6	6
1731	Electrical work	418	4 083	122 841	309 619	299 783	194 712	108 675	9 837	3 956	3	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	247	1 682	33 743	108 281	101 447	64 766	36 917	6 834	2 199	6	9
1742	Plastering, drywall, and insulation work	136	2 500	60 749	169 555	154 871	115 094	(D)	14 684	2 307	5	4
1743	Terrazzo, tile, marble, and mosaic work	20	273	7 327	22 621	20 815	12 918	8 100	1 806	441	13	13
175	Carpentry and floor work:											
1751	Carpentry	266	1 276	23 240	69 105	60 933	41 131	22 386	8 172	1 115	6	6
1752	Floor laying and other floorwork	93	537	9 904	(D)	31 135	19 879	(D)	(D)	241	11	12
1761	Roofing, siding, and sheet metal work	344	2 350	47 533	154 660	143 819	84 849	61 278	10 841	2 283	7	5
1771	Concrete work	366	2 930	57 018	222 975	193 813	119 858	75 754	29 163	5 601	5	4
1781	Water well drilling	*5	33	717	(D)	(D)	1 797	*740	(D)	*418	23	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	31	628	19 299	39 726	37 459	26 328	(D)	2 267	574	7	12
1793	Glass and glazing work	53	442	10 543	35 955	34 904	19 811	16 477	1 050	*632	3	4
1794	Excavation work	186	1 327	27 583	107 013	96 615	73 731	(D)	10 399	6 294	8	8
1795	Wrecking and demolition work	8	62	1 380	6 483	6 026	5 626	400	457	36	25	7
1796	Installing building equipment, n.e.c.	29	912	29 222	69 000	64 402	51 490	14 801	4 598	330	(W)	(W)
1799	Special trade contractors, n.e.c.	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
6552	Land subdividers and developers, n.e.c.	28	*66	*1 256	*9 670	*7 793	*7 601	380	*1 877	20	41	70
	AKRON, OH PMSA											
	Construction industries and land subdividers and developers	1 240	10 196	224 333	903 919	693 164	436 826	288 753	210 755	14 227	2	2
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	214	884	16 617	94 953	64 741	33 341	33 742	30 212	2 020	11	13
1522	Other residential buildings	36	181	3 397	28 006	17 984	10 739	8 473	*10 022	(D)	12	19
1531	Operative builders	29	386	7 728	99 786	49 082	13 984	38 121	50 704	506	16	21
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	26	206	4 158	30 695	15 621	8 324	(D)	15 074	(D)	20	21
1542	Nonresidential buildings, n.e.c.	59	534	13 395	87 154	40 171	24 773	15 598	46 983	1 270	9	7
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	11	222	6 574	35 549	(D)	17 511	(D)	(D)	(D)	10	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	19	352	9 431	28 833	25 397	17 714	(D)	3 436	933	11	7
1629	Heavy construction, n.e.c.	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)

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1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	AKRON, OH PMSA—Con.											
15,16, 17	Construction Industries and land subdividers and developers—Con. Construction Industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	171	1 061	24 938	76 646	69 501	39 634	30 672	7 145	800	6	5
1721	Painting and paper hanging-----	86	579	10 350	21 325	20 355	16 292	4 879	970	*191	13	14
1731	Electrical work -----	83	682	19 537	50 003	49 200	33 027	(D)	803	757	6	6
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	69	479	8 419	25 008	23 338	12 774	10 669	*1 671	*857	13	11
1742	Plastering, drywall, and insulation work -----	25	899	25 585	60 734	56 262	55 713	(D)	4 472	(D)	6	5
1743	Terrazzo, tile, marble, and mosaic work -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry-----	56	304	4 886	16 413	14 606	10 501	4 268	1 807	533	15	15
1752	Floor laying and other floorwork----	28	219	3 871	(D)	(D)	(D)	(D)	(D)	(D)	19	(D)
1761	Roofing, siding, and sheet metal work -----	73	624	10 505	37 995	35 706	20 101	15 739	2 288	*271	18	12
1771	Concrete work -----	69	570	8 558	36 468	33 330	21 306	(D)	3 138	1 648	13	12
1781	Water well drilling -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	13	(D)	(D)	(D)	(D)	7 114	3 754	(D)	(D)	(D)	(D)
1793	Glass and glazing work -----	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work -----	53	274	4 389	21 104	19 310	13 368	5 955	*1 793	601	20	24
1795	Wrecking and demolition work -----	-	-	-	-	-	-	-	-	-	-	-
1796	Installing building equipment, n.e.c.---	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.----	65	624	10 051	34 999	32 488	22 053	11 734	2 512	77	18	20
6552	Land subdividers and developers, n.e.c.-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	CLEVELAND, OH PMSA											
	Construction Industries and land subdividers and developers-----	3 451	32 823	832 496	3 503 186	2 523 609	1 631 073	992 485	979 577	46 337	1	1
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	486	1 990	35 996	248 735	176 632	97 846	81 520	72 103	2 521	8	14
1522	Other residential buildings -----	50	669	11 347	53 605	34 043	20 154	13 898	19 561	*157	16	14
1531	Operative builders -----	65	488	12 782	108 339	59 722	35 953	(D)	48 617	381	11	11
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	41	1 225	32 494	120 805	69 573	47 627	26 451	51 232	716	4	8
1542	Nonresidential buildings, n.e.c. -----	241	2 746	79 169	698 816	304 986	175 354	142 774	393 830	3 535	4	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	65	1 816	53 611	258 367	198 957	103 423	99 728	59 410	8 318	11	6
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	74	837	22 652	93 049	83 401	55 479	28 371	9 648	2 835	8	7
1629	Heavy construction, n.e.c.-----	41	3 177	99 923	420 529	(D)	217 088	73 281	(D)	3 307	2	(D)

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1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CLEVELAND, OH PMSA—Con.											
15,16, 17	Construction industries and land subdividers and developers—Con. Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning -----	483	4 061	105 104	348 193	295 843	179 966	119 485	52 350	3 924	4	3
1721	Painting and paper hanging -----	252	1 215	27 600	68 179	64 572	52 165	(D)	3 607	1 146	7	5
1731	Electrical work -----	291	2 883	88 084	220 073	212 237	137 123	77 859	7 836	2 661	4	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	162	1 124	23 731	78 767	73 676	49 358	24 448	5 091	1 266	8	12
1742	Plastering, drywall, and insulation work -----	96	1 490	33 012	102 890	93 269	56 579	37 001	9 622	1 452	8	6
1743	Terrazzo, tile, marble, and mosaic work -----	16	216	5 510	17 824	16 082	9 981	6 304	1 742	(D)	16	17
175	Carpentry and floor work:											
1751	Carpentry -----	180	837	16 158	47 987	41 839	27 581	16 676	6 148	542	7	8
1752	Floor laying and other floorwork -----	44	251	4 683	20 784	16 729	(D)	(D)	*4 055	(D)	15	18
1761	Roofing, siding, and sheet metal work -----	235	1 513	32 864	103 856	96 004	56 520	40 896	7 852	1 670	7	6
1771	Concrete work -----	255	2 153	45 103	172 807	147 394	90 079	58 640	25 412	3 245	5	4
1781	Water well drilling -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	17	457	14 648	27 491	26 105	18 738	(D)	1 386	*441	10	18
1793	Glass and glazing work -----	38	286	6 694	22 409	(D)	12 790	9 434	(D)	*498	4	(D)
1794	Excavation work -----	119	957	20 889	76 441	69 065	54 231	(D)	7 376	4 978	10	8
1795	Wrecking and demolition work -----	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -	22	614	20 652	54 197	50 815	39 253	12 993	3 382	324	(W)	(W)
1799	Special trade contractors, n.e.c. -	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
6552	Land subdividers and developers, n.e.c. -----	22	*60	*1 211	(D)	(D)	(D)	(D)	*1 851	(D)	44	(D)
	LORAIN-ELYRIA, OH PMSA											
	Construction industries and land subdividers and developers -----	534	3 584	74 660	301 548	240 102	155 206	90 671	61 446	5 665	4	3
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	100	428	7 173	44 992	28 688	17 259	12 066	16 304	(D)	18	13
1522	Other residential buildings -----	-	-	-	-	-	-	-	-	-	-	-
1531	Operative builders -----	*16	72	1 546	12 810	9 123	4 149	(D)	3 687	*79	33	24
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	*14	123	2 338	17 048	10 683	7 711	(D)	6 366	(D)	39	17
1542	Nonresidential buildings, n.e.c. -	28	228	5 824	43 106	19 056	13 194	6 145	24 049	*237	14	15
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	*16	*124	1 587	*7 972	(D)	3 800	(D)	(D)	(D)	56	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines -----	*13	75	1 835	6 540	5 958	3 866	(D)	582	*323	22	21
1629	Heavy construction, n.e.c. -----	9	93	1 480	4 590	(D)	3 043	1 221	(D)	(D)	2	(D)

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	LORAIN-ELYRIA, OH PMSA— Con.											
	Construction Industries and land subdividers and developers—Con.											
15,16, 17 17	Construction Industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	55	509	10 227	31 422	29 840	18 385	11 893	1 582	*955	14	11
1721	Painting and paper hanging	19	81	*1 673	*7 053	*6 781	*5 773	(D)	(S)	(S)	10	62
1731	Electrical work	45	518	15 221	39 544	38 346	24 561	(D)	1 198	538	7	7
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	17	79	1 594	4 506	4 434	2 634	1 800	*72	(S)	23	6
1742	Plastering, drywall, and insulation work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1743	Terrazzo, tile, marble, and mosaic work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry	29	135	2 197	4 706	4 488	3 049	(D)	217	39	9	5
1752	Floor laying and other floorwork	20	68	*1 350	(D)	(D)	3 157	3 073	(D)	20	31	(D)
1761	Roofing, siding, and sheet metal work	36	212	4 163	12 809	12 109	8 229	4 644	*700	*343	13	13
1771	Concrete work	42	208	3 357	13 701	13 089	8 472	(D)	*612	*708	21	19
1781	Water well drilling	-	-	-	-	-	-	-	-	-	-	-
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ..	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c.	37	252	4 048	17 022	15 364	10 966	5 296	*1 658	(S)	24	23
6552	Land subdividers and developers, n.e.c.	-	-	-	-	-	-	-	-	-	-	-
	COLUMBUS, OH MSA											
	Construction Industries and land subdividers and developers	2 590	27 892	638 293	3 171 669	2 236 868	1 407 622	905 275	934 801	61 286	1	2
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	302	1 576	26 486	180 150	130 497	90 681	43 664	49 653	1 719	10	22
1522	Other residential buildings	56	1 504	31 119	229 019	109 928	80 351	36 455	119 091	7 106	7	11
1531	Operative builders	118	1 072	31 145	440 419	209 281	124 786	89 420	231 138	961	8	10
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	35	825	22 045	209 662	101 531	55 428	(D)	108 131	3 283	7	5
1542	Nonresidential buildings, n.e.c.	160	2 066	50 129	412 551	169 808	111 480	65 516	242 743	2 312	6	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	61	1 732	52 183	228 179	175 169	122 898	(D)	53 010	15 283	7	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines	44	1 535	36 093	117 305	108 347	69 388	40 209	8 957	5 551	3	5
1629	Heavy construction, n.e.c.	23	499	14 594	80 745	66 963	47 685	20 253	13 782	*1 883	9	6

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	COLUMBUS, OH MSA—Con.											
	Construction industries and land subdividers and developers—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	290	3 610	92 913	322 671	284 577	158 122	129 358	38 094	4 537	3	3
1721	Painting and paper hanging-----	162	1 011	16 411	44 258	39 542	30 089	(D)	4 716	*1 236	9	6
1731	Electrical work -----	212	2 733	67 136	191 954	188 563	113 502	76 463	3 391	3 413	3	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	149	1 251	21 839	61 421	56 955	34 218	(D)	4 466	740	8	9
1742	Plastering, drywall, and insulation work -----	70	1 364	27 538	77 692	71 425	42 344	30 367	6 266	1 050	3	4
1743	Terrazzo, tile, marble, and mosaic work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
175	Carpentry and floor work:											
1751	Carpentry -----	224	1 234	20 838	79 901	71 601	45 802	27 923	8 300	1 253	8	7
1752	Floor laying and other floorwork-----	34	187	4 167	13 545	12 193	7 158	(D)	*1 352	264	17	16
1761	Roofing, siding, and sheet metal work -----	197	1 625	34 986	123 677	115 599	71 476	50 300	8 078	1 525	5	4
1771	Concrete work -----	153	1 301	25 305	111 487	101 932	55 080	46 978	9 555	2 477	9	6
1781	Water well drilling -----	20	136	1 995	9 751	(D)	5 044	4 473	(D)	296	26	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	10	157	3 973	14 180	13 473	9 042	4 628	707	*119	4	2
1793	Glass and glazing work -----	25	197	4 817	19 205	18 684	8 909	11 411	521	351	9	6
1794	Excavation work -----	87	809	19 647	81 448	72 701	48 694	25 575	8 748	4 099	9	8
1795	Wrecking and demolition work -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.-----	12	314	10 152	31 250	30 715	23 475	7 300	535	285	(W)	(W)
1799	Special trade contractors, n.e.c.-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
6552	Land subdividers and developers, n.e.c.-----	31	144	2 814	*11 587	*9 263	*8 580	1 292	*2 324	*194	39	50
	DAYTON-SPRINGFIELD, OH MSA											
	Construction industries and land subdividers and developers-----	1 737	16 160	354 542	1 742 361	1 336 052	829 815	541 799	406 309	21 535	2	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	272	1 024	15 866	104 265	71 467	37 154	35 946	32 797	876	12	17
1522	Other residential buildings -----	33	272	4 994	29 267	17 776	11 038	7 538	11 491	*872	35	19
1531	Operative builders -----	58	497	13 129	127 226	81 404	60 242	31 568	45 823	874	15	25
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	42	369	8 796	51 036	27 913	18 672	10 092	23 123	*746	18	15
1542	Nonresidential buildings, n.e.c.-----	84	2 196	59 155	581 281	386 851	245 962	142 718	194 430	1 707	4	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	26	314	8 316	33 471	29 539	15 358	14 836	3 933	224	9	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines -----	6	218	5 337	26 638	22 770	14 736	(D)	3 868	1 496	(W)	(W)
1629	Heavy construction, n.e.c.-----	23	654	19 225	94 048	62 826	36 747	(D)	31 221	627	(W)	(W)

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	DAYTON-SPRINGFIELD, OH MSA—Con.											
	Construction Industries and land subdividers and developers—Con. Construction Industries—Con.											
15,16, 17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	245	2 689	63 165	194 490	170 125	100 331	73 129	24 365	2 438	3	4
1721	Painting and paper hanging-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1731	Electrical work -----	138	1 811	45 086	129 559	122 971	72 648	(D)	6 588	1 810	3	4
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	103	667	10 815	31 118	28 273	18 702	(D)	*2 845	740	16	14
1742	Plastering, drywall, and insulation work -----	73	725	12 201	37 610	36 803	22 020	16 229	807	470	9	10
1743	Terrazzo, tile, marble, and mosaic work -----	*16	82	1 998	8 451	8 030	3 238	(D)	421	102	5	19
175	Carpentry and floor work:											
1751	Carpentry-----	109	602	9 565	28 954	25 172	15 995	9 505	3 782	364	16	18
1752	Floor laying and other floorwork----	33	124	1 951	*11 954	*10 136	4 187	*6 582	*1 818	*240	34	42
1761	Roofing, siding, and sheet metal work -----	118	1 079	22 058	79 493	72 466	44 244	29 445	7 027	875	8	12
1771	Concrete work -----	75	569	10 094	36 946	35 542	21 125	14 747	1 405	1 695	15	15
1781	Water well drilling -----	10	43	913	(D)	(D)	(D)	1 060	(D)	*264	3	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	7	74	1 847	3 781	(D)	3 105	764	(D)	49	(W)	(D)
1793	Glass and glazing work -----	*16	147	2 123	10 474	10 347	4 626	(D)	127	39	35	32
1794	Excavation work -----	56	570	12 011	44 071	40 402	25 596	(D)	3 669	3 212	10	7
1795	Wrecking and demolition work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.----	17	272	5 991	19 085	16 081	14 405	(D)	3 004	(D)	(W)	(W)
1799	Special trade contractors, n.e.c.-----	78	525	10 178	31 845	29 770	20 928	9 995	2 075	*331	15	15
6552	Land subdividers and developers, n.e.c.-----	*8	(D)	(D)	*700	*607	*638	(S)	(S)	-	(D)	64
	TOLEDO, OH MSA											
	Construction Industries and land subdividers and developers-----	1 175	11 496	282 600	1 240 311	876 311	547 166	350 820	364 000	19 948	2	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1531	Operative builders -----	64	309	4 628	62 430	39 210	18 934	22 778	23 220	*418	23	25
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	21	602	18 902	123 055	64 932	41 107	(D)	58 123	(D)	6	4
1542	Nonresidential buildings, n.e.c.-----	46	903	26 495	285 069	80 795	48 307	(D)	204 274	588	4	10
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	16	631	16 569	84 775	67 494	42 582	25 479	17 282	(D)	6	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	18	428	13 253	36 651	33 607	26 359	(D)	3 044	2 151	7	5
1629	Heavy construction, n.e.c.-----	11	239	7 426	17 881	(D)	10 730	5 578	(D)	*552	15	(D)

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	TOLEDO, OH MSA—Con.											
15,16, 17	Construction industries and land subdividers and developers—Con. Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	190	1 748	42 312	134 506	120 221	68 322	52 284	14 285	2 273	6	6
1721	Painting and paper hanging	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1731	Electrical work	91	1 511	47 910	132 093	124 561	81 138	44 079	7 532	1 402	4	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	56	548	8 665	21 195	18 698	12 953	5 745	2 497	524	9	7
1742	Plastering, drywall, and insulation work	42	608	14 876	42 754	37 835	24 110	(D)	4 918	253	16	8
1743	Terrazzo, tile, marble, and mosaic work	8	33	702	(D)	(D)	1 331	798	(D)	(D)	8	(D)
175	Carpentry and floor work:											
1751	Carpentry	98	396	6 257	24 934	22 711	13 083	11 104	2 223	*209	19	22
1752	Floor laying and other floorwork	26	173	4 631	13 417	13 171	8 075	(D)	246	283	15	6
1761	Roofing, siding, and sheet metal work	71	790	17 356	54 978	52 837	32 285	21 280	2 141	787	8	7
1771	Concrete work	77	584	11 819	46 760	42 929	25 843	(D)	3 831	1 197	8	10
1781	Water well drilling	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work	8	70	1 174	4 069	(D)	2 087	2 035	(D)	127	(W)	(D)
1794	Excavation work	31	188	4 065	14 708	(D)	12 073	4 633	(D)	(D)	20	(D)
1795	Wrecking and demolition work	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1799	Special trade contractors, n.e.c.	29	226	3 614	12 948	11 090	7 560	4 387	1 858	*238	25	20
6552	Land subdividers and developers, n.e.c.	5	14	237	544	(D)	606	62	(D)	9	(W)	(D)
	YOUNGSTOWN-WARREN, OH MSA											
	Construction industries and land subdividers and developers	915	6 670	145 480	578 666	469 015	295 779	182 481	109 651	9 650	3	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	121	413	5 797	38 504	29 062	16 532	13 260	9 441	782	15	22
1522	Other residential buildings	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1531	Operative builders	*13	*77	*1 283	*11 043	*7 617	*2 301	*5 372	*3 426	(S)	46	56
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	7	80	(D)	(D)	5 999	(D)	1 479	(D)	*7	4	5
1542	Nonresidential buildings, n.e.c.	71	757	18 592	106 780	62 188	43 213	(D)	44 592	914	9	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	27	293	7 007	26 450	23 174	14 672	8 591	3 276	578	10	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	8	114	2 681	9 801	7 685	5 174	2 525	2 116	205	23	19
1623	Water, sewer, and utility lines	28	474	10 668	33 187	29 993	20 976	9 295	3 194	857	8	5
1629	Heavy construction, n.e.c.	29	485	12 119	52 930	38 207	24 363	(D)	14 723	1 259	8	7

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	YOUNGSTOWN-WARREN, OH MSA—Con.											
	Construction industries and land subdividers and developers—Con.											
15,16, 17 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	107	749	19 679	61 854	57 093	33 553	24 899	4 761	714	7	6
1721	Painting and paper hanging-----	82	408	8 943	26 467	24 481	19 196	6 094	1 986	611	13	9
1731	Electrical work-----	60	492	12 076	39 232	37 910	22 344	15 606	1 322	154	7	6
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1742	Plastering, drywall, and insulation work-----	18	220	5 417	14 556	13 726	9 593	(D)	830	126	7	5
1743	Terrazzo, tile, marble, and mosaic work-----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry-----	54	303	5 784	28 116	23 760	14 116	(D)	4 356	321	11	22
1752	Floor laying and other floorwork-----	19	57	1 072	4 936	4 366	1 974	2 415	*570	*111	11	18
1761	Roofing, siding, and sheet metal work-----	38	324	8 615	26 544	(D)	9 465	12 564	(D)	*151	11	(D)
1771	Concrete work-----	51	289	4 692	22 920	21 490	12 122	10 149	1 430	466	20	27
1781	Water well drilling-----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	5	123	3 956	10 521	(D)	8 054	*2 576	(D)	(D)	14	(D)
1793	Glass and glazing work-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1794	Excavation work-----	39	158	2 811	10 859	10 040	7 352	(D)	819	1 201	28	25
1795	Wrecking and demolition work-----	-	-	-	-	-	-	-	-	-	-	-
1796	Installing building equipment, n.e.c.-	9	112	3 104	(D)	(D)	9 338	2 521	(D)	(D)	(W)	(D)
1799	Special trade contractors, n.e.c.-	46	308	3 635	12 721	11 376	6 500	5 439	1 345	*243	36	28
6552	Land subdividers and developers, n.e.c.-----	*7	*12	55	258	(D)	200	22	(D)	*7	74	(D)

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Wisconsin

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SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Wisconsin. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 34,069 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$8.7 billion in total value of business done.

Most of the 34,069 construction establishments were small. Of the total, 23,338 were nonemployers, and over half of the employer establishments had less than 5 employees. The 4,058 construction establishments with 5 employees or more, while representing only 12 percent of all establishments, accounted for more than 76 percent of the total value of business done.

ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$7.7 billion on total dollar value of business done. Of this amount, \$7.5 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$1.7 billion, leaving net value of construction work of \$5.8 billion. In addition, these establishments paid out \$2.7 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$3.6 billion. (See Introduction and appendices for explanation of terms.)

There were 10,731 establishments with total employment averaging 77,419 during the year. Total payroll for 1987 was \$1.8 billion. Total hours worked by construction workers during the year were 106 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 23,338 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$952 million. Most of these establishments, about 80 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**
(Percent)

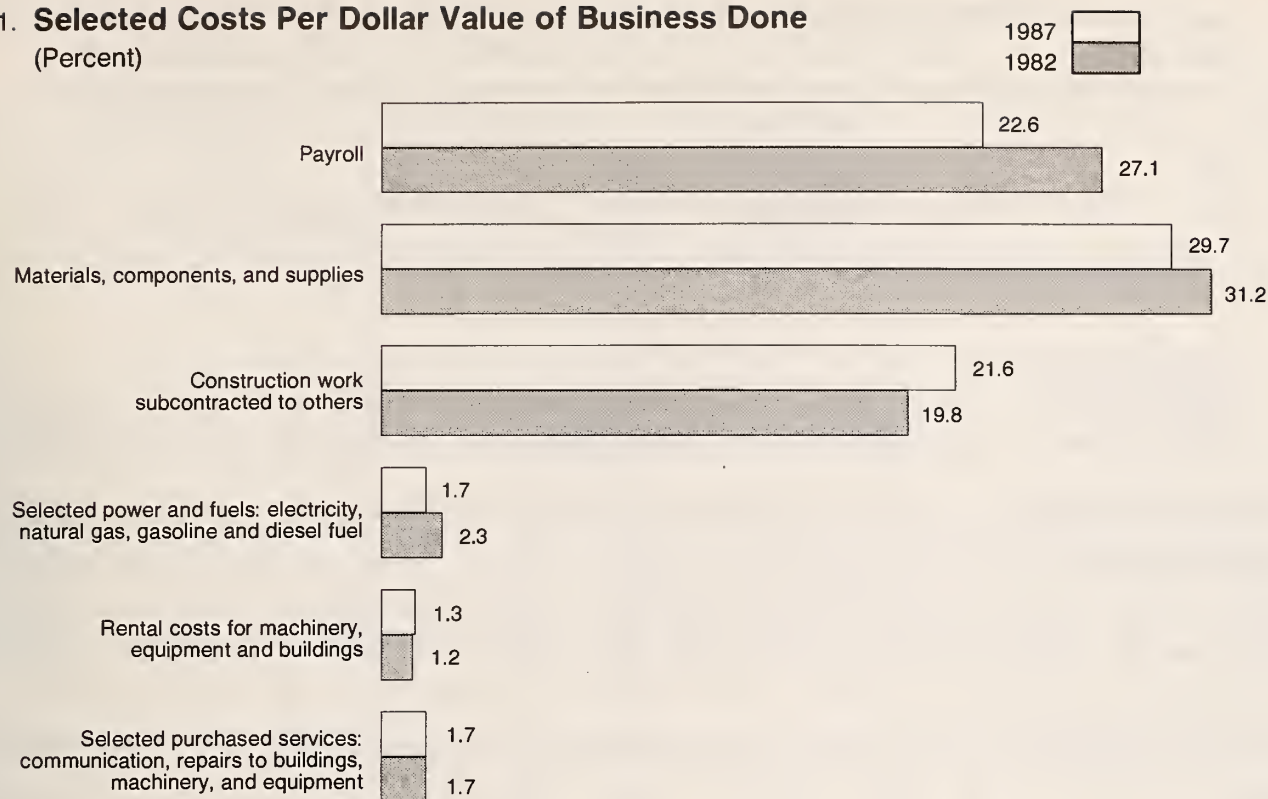


Figure 2. **Value of Construction Work by Type of Construction**
(Percent)

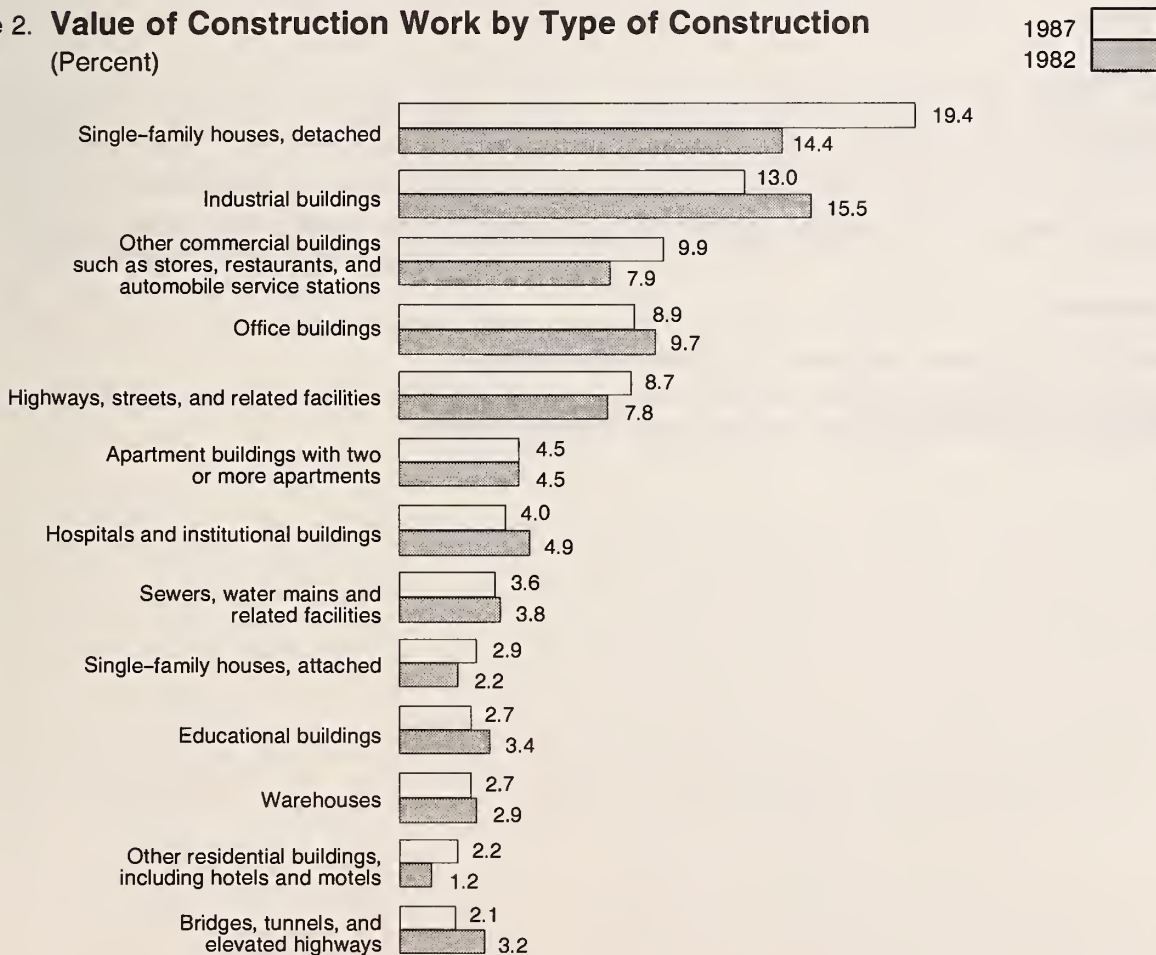


Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1987													
	Construction industries and land subdividers and developers -----	34 069	27 094	77 419	8 701 940	23 338	23 351	952 393	10 731	3 743	77 419	7 749 547	1	1
15, 16, 17	Construction industries -----	33 387	26 427	77 267	8 543 468	22 732	22 704	824 767	10 655	3 723	77 267	7 718 701	1	1
15	Building construction—General contractors and operative builders ----	6 833	4 712	20 688	3 209 971	3 900	3 726	283 223	2 933	986	20 688	2 926 748	2	3
16	Heavy construction other than building construction— contractors-----	849	415	10 465	1 366 247	210	205	23 526	639	210	10 465	1 342 721	2	2
17	Special trade contractors -----	25 705	21 300	46 114	3 967 250	18 622	18 773	518 018	7 083	2 527	46 114	3 449 232	1	1
1711	Plumbing, heating, and air-conditioning --	2 877	1 797	11 208	1 029 137	1 326	1 322	57 604	1 551	475	11 208	971 533	2	2
1731	Electrical work-----	2 173	1 523	7 128	535 660	1 320	1 327	39 399	853	196	7 128	496 261	2	2
6552	Land subdividers and developers, n.e.c.²-----	672	657	140	158 459	606	647	127 626	66	10	140	*30 833	25	43
	1982													
	Construction industries and land subdividers and developers -----	27 876	21 780	65 892	4 993 391	17 821	17 922	494 366	10 055	3 858	65 892	4 499 025	1	1
15, 16, 17	Construction industries -----	27 437	21 395	65 789	4 952 055	17 443	17 554	457 963	9 994	3 841	65 789	4 494 092	1	1
15	Building construction—General contractors and operative builders ----	5 210	3 597	16 374	1 607 848	2 862	2 858	159 716	2 348	739	16 374	1 448 132	2	2
16	Heavy construction other than building construction— contractors-----	1 003	570	7 609	775 078	472	460	14 496	531	110	7 609	760 582	2	1
17	Special trade contractors -----	21 224	17 228	41 806	2 569 129	14 109	14 236	283 751	7 115	2 992	41 806	2 285 378	2	1
1711	Plumbing, heating, and air-conditioning --	2 409	1 449	11 798	788 970	939	950	35 381	1 470	499	11 798	753 589	2	1
1731	Electrical work-----	1 834	1 303	6 537	391 259	966	964	25 374	868	339	6 537	365 885	6	2
6552	Land subdividers and developers, n.e.c.²-----	435	383	98	41 331	378	368	36 403	57	*15	98	4 928	18	24

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

¹For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

²For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll ¹			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done ²	J	K
	A	B	C	D	E	F	G	H	I	J	K		
1987													
The State -----	34 069	27 094	77 419	8 701 940	23 338	23 351	952 393	10 731	3 743	77 419	7 749 547	1	1
\$10,000,000 or more -----	91	2	12 354	2 134 256	—	—	—	91	2	12 354	2 134 256	(W)	(W)
\$5,000,000 to \$9,999,999 -----	148	8	7 562	1 007 918	4	6	23 864	144	2	7 562	984 054	1	5
\$2,500,000 to \$4,999,999 -----	354	21	10 118	1 246 653	9	5	27 883	345	*16	10 118	1 218 770	3	5
\$1,000,000 to \$2,499,999 -----	832	102	11 802	1 280 371	64	71	90 163	768	31	11 802	1 190 208	3	4
\$500,000 to \$999,999 -----	1 400	369	11 002	966 190	129	119	90 156	1 271	250	11 002	876 034	4	4
 \$250,000 to \$499,999 -----	 2 144	 962	 9 846	 748 499	 317	 309	 108 146	 1 827	 653	 9 846	 640 353	 5	 5
\$100,000 to \$249,999 -----	4 753	3 068	10 220	757 733	1 404	1 447	210 084	3 349	1 621	10 220	547 649	4	4
\$50,000 to \$99,999 -----	4 018	3 122	3 124	287 973	2 358	2 397	164 915	1 660	725	3 124	123 058	7	5
\$25,000 to \$49,999 -----	(S)	(S)	(S)	(S)	3 222	3 233	114 953	(S)	(S)	(S)	(S)	(S)	(S)
 Less than \$25,000 -----	 (S)	 (S)	 (S)	 (S)	 15 831	 15 764	 122 230	 (S)	 (S)	 (S)	 (S)	 (S)	 (S)
\$10,000 to \$24,999 -----	(NA)	(NA)	(NA)	(NA)	4 951	4 925	81 080	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 -----	(NA)	(NA)	(NA)	(NA)	3 485	3 473	25 151	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 -----	(NA)	(NA)	(NA)	(NA)	2 888	2 877	10 548	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 -----	(NA)	(NA)	(NA)	(NA)	4 507	4 489	5 451	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1982													
The State -----	27 876	21 780	65 892	4 993 391	17 821	17 922	494 366	10 055	3 858	65 892	4 499 025	1	1
\$10,000,000 or more -----	52	4	10 016	(D)	1	2	(D)	51	2	10 016	1 077 394	(W)	(W)
\$5,000,000 to \$9,999,999 -----	82	2	5 285	(D)	—	—	—	82	2	5 285	(D)	(W)	(D)
\$2,500,000 to \$4,999,999 -----	157	1	5 746	(D)	1	1	(D)	156	—	5 746	1 090 417	(W)	(W)
\$1,000,000 to \$2,499,999 -----	517	23	10 289	2 996 460	13	14	49 883	504	*9	10 289	778 766	1	3
\$500,000 to \$999,999 -----	717	83	7 600	498 855	36	34	24 910	681	49	7 600	473 945	4	4
 \$250,000 to \$499,999 -----	 1 353	 390	 8 108	 469 226	 131	 124	 43 753	 1 222	 266	 8 108	 425 473	 4	 5
\$100,000 to \$249,999 -----	3 408	1 767	10 421	541 025	646	670	94 908	2 762	1 097	10 421	446 117	4	4
\$50,000 to \$99,999 -----	3 439	2 571	4 490	245 574	1 486	1 561	102 727	1 953	1 010	4 490	142 847	5	4
\$25,000 to \$49,999 -----	3 607	3 128	2 288	129 738	2 352	2 418	82 173	1 255	710	2 288	47 565	14	6
 Less than \$25,000 -----	 14 542	 13 810	 1 647	 112 512	 13 155	 13 098	 96 012	 1 387	 712	 1 647	 16 500	 5	 5
\$10,000 to \$24,999 -----	(NA)	(NA)	(NA)	(NA)	3 974	3 964	62 635	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 -----	(NA)	(NA)	(NA)	(NA)	3 118	3 101	20 992	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 -----	(NA)	(NA)	(NA)	(NA)	3 419	3 401	9 741	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 -----	(NA)	(NA)	(NA)	(NA)	2 644	2 632	2 644	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

¹For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

²For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	Construction industries and land subdividers and developers -----	10 731	77 419	61 234	1 750 847	1 316 924	105 704	7 481 951	5 806 805
15, 16, 17	Construction industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses-----	2 006	7 893	6 139	123 584	89 097	9 962	(D)	539 300
1522	Other residential buildings-----	146	1 694	1 325	35 520	24 986	2 043	266 351	123 278
1531	Operative builders-----	96	684	459	12 255	7 104	638	(D)	106 405
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	155	2 830	2 258	73 096	54 672	4 015	369 335	208 072
1542	Nonresidential buildings, n.e.c.-----	530	7 587	5 821	194 181	137 774	10 626	1 174 550	647 219
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction-----	219	4 381	3 696	128 023	103 018	6 853	662 689	518 502
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	16	977	786	34 488	23 111	1 591	148 661	114 613
1623	Water, sewer, and utility lines-----	171	3 500	2 954	96 133	70 811	5 616	327 181	297 197
1629	Heavy construction, n.e.c.-----	233	1 607	1 296	35 352	26 516	2 027	173 335	134 361
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning-----	1 551	11 208	8 249	275 272	202 158	15 049	943 910	874 272
1721	Painting and paper hanging-----	639	2 904	2 392	46 591	37 343	3 525	125 782	120 810
1731	Electrical work-----	853	7 128	5 527	179 129	139 391	9 759	483 991	476 474
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	482	2 660	2 322	51 728	44 150	3 644	156 069	150 161
1742	Plastering, drywall, and insulation work-----	349	2 559	2 087	55 099	44 442	3 266	166 923	154 417
1743	Terrazzo, tile, marble, and mosaic work-----	50	359	280	9 252	7 153	483	27 262	26 646
175	Carpentry and floor work:								
1751	Carpentry-----	795	2 567	2 157	41 986	34 441	3 409	163 947	144 656
1752	Floor laying and other floor work-----	168	742	603	14 505	10 484	929	50 740	48 868
1761	Roofing, siding, and sheet metal work-----	595	4 317	3 429	79 718	57 726	5 498	284 358	271 807
1771	Concrete work-----	630	3 662	3 095	66 462	53 330	5 267	257 993	244 587
1781	Water well drilling-----	75	328	246	6 012	4 532	495	25 829	25 202
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	58	799	659	21 593	16 989	1 143	66 489	62 990
1793	Glass and glazing work-----	70	816	558	19 119	11 867	946	55 149	54 498
1794	Excavation work-----	313	2 004	1 632	45 435	36 969	3 003	172 266	155 784
1795	Wrecking and demolition work-----	29	136	114	2 266	1 814	245	5 479	(D)
1796	Installing building equipment, n.e.c.-----	66	1 797	1 449	63 407	46 778	3 076	223 149	(D)
1799	Special trade contractors, n.e.c.-----	360	2 128	1 652	38 200	29 262	2 519	143 184	134 103
6552	Land subdividers and developers, n.e.c.-----	66	140	31	2 432	*995	*64	20 109	*11 209

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
3 605 139	2 436 046	1 675 146	99 749	162 187	1 206 644	65 892	4 361 699	2 091 361	1	1	3	15, 16, 17
												15
276 405	282 164	(D)	5 121	14 399	71 713	5 471	324 319	117 457	4	5	13	152
76 619	55 385	143 073	1 138	2 394	18 920	776	107 814	26 333	8	7	19	1521
												1522
55 887	55 580	(D)	429	1 285	13 295	542	61 989	23 416	19	26	16	1531
134 820	94 711	161 263	2 220	5 011	36 332	2 691	259 789	88 047	8	11	27	154
436 955	261 162	527 330	8 843	10 467	96 328	6 894	648 965	214 858	3	2	8	1541
												1542
												16
314 077	223 490	144 187	17 817	25 215	229 372	2 821	297 066	131 692	3	4	6	1611
61 930	(D)	34 048	1 469	5 175	45 549	988	131 490	(D)	3	2	3	162
203 108	99 317	29 984	8 932	19 282	121 135	2 581	200 115	118 394	2	2	4	1622
92 049	44 563	38 973	3 940	8 259	90 490	1 219	116 325	77 793	8	6	16	1623
												1629
												17
514 494	387 400	69 638	13 139	14 729	103 755	11 798	733 477	377 945	2	2	6	1711
94 758	28 055	4 971	2 269	3 219	17 391	2 591	77 243	57 954	7	6	22	1721
294 711	194 033	7 516	4 783	7 286	53 366	6 537	354 985	210 843	2	2	7	1731
92 226	59 980	5 907	1 774	3 504	19 154	1 975	73 395	43 588	5	4	18	174
95 428	62 017	12 505	1 357	1 741	10 002	2 449	116 178	77 113	5	6	20	1741
14 426	12 708	616	199	297	2 583	521	32 177	18 145	8	9	11	1742
												1743
81 410	65 493	19 290	1 308	2 404	15 443	2 819	123 533	63 902	6	6	20	175
28 165	24 499	1 872	439	901	3 760	566	23 494	12 708	12	11	37	1751
												1752
158 898	120 663	12 551	4 304	5 552	39 635	3 482	178 655	104 082	4	4	12	1761
151 330	99 588	13 406	4 736	9 975	59 831	2 371	114 485	61 142	5	5	13	1771
14 551	11 104	627	*258	*1 693	7 390	297	16 447	9 238	12	14	43	1781
45 206	18 117	3 498	1 860	1 581	8 264	502	24 599	16 382	11	7	6	179
33 857	28 311	651	754	626	5 693	548	35 095	20 281	15	15	18	1791
114 945	44 748	16 481	7 428	10 629	87 465	2 798	168 088	112 246	8	6	17	1793
4 927	(D)	(D)	*356	(S)	*5 430	190	6 369	5 247	24	(D)	(S)	1794
115 496	46 890	(D)	2 542	2 836	27 430	1 084	80 318	63 590	3	(D)	31	1795
88 473	55 575	9 081	2 253	2 207	15 584	1 278	52 363	(D)	10	9	18	1796
												1799
*9 977	*2 628	8 900	68	126	1 320	98	2 921	1 906	25	50	34	6552

Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year	10 731	10 055	11 016	9 671	1	2	2	3
Proprietors and working partners.....	3 743	3 858	5 806	5 830	4	4	4	4
All employees**	77 419	65 892	80 680	69 697	1	1	1	2
Construction workers:								
March.....	49 009	42 241	53 042	44 770	1	1	1	2
May.....	62 189	53 877	70 423	57 267	1	1	1	2
August.....	69 941	58 478	78 079	66 737	1	1	1	2
November.....	63 796	52 911	71 878	61 344	1	2	1	2
Average.....	61 234	52 996	68 415	58 519	1	1	1	2
Other employees:								
March.....	15 570	12 842	11 663	10 632	1	2	2	2
May.....	16 049	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
August.....	16 534	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
November.....	16 598	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Average.....	16 188	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March	20 057	16 759	(NA)	(NA)	1	1	(NA)	(NA)
April to June.....	26 777	20 876	(NA)	(NA)	1	1	(NA)	(NA)
July to September.....	31 127	23 792	(NA)	(NA)	1	1	(NA)	(NA)
October to December.....	27 742	20 987	(NA)	(NA)	1	2	(NA)	(NA)
Total hours worked.....	105 704	82 416	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees	1 750 847	1 218 540	1 117 593	728 148	1	1	1	2
Payroll, construction workers	1 316 924	945 721	920 932	599 507	1	1	1	2
Payroll, other employees	433 923	272 819	196 661	128 641	1	1	1	2
First quarter payroll, all employees	347 320	248 844	204 377	(NA)	1	1	1	(NA)
Employer costs for fringe benefits, all employees	439 900	218 534	211 139	(NA)	1	1	1	(NA)
Legally required expenditures.....	277 813	161 965	111 758	(NA)	1	1	1	(NA)
Voluntary expenditures.....	162 087	56 569	99 382	(NA)	1	1	1	(NA)
Dollar value of business done	7 749 547	4 499 025	4 362 260	2 541 604	1	1	1	2
Value of construction work ¹	7 481 951	4 361 699	4 205 483	2 464 400	1	1	1	2
Value of construction work subcontracted in from others	1 622 570	923 855	960 195	437 579	2	2	1	2
Land receipts ²	33 215	10 868	(NA)	(NA)	22	16	(NA)	(NA)
Other business receipts	234 380	126 458	156 776	77 204	3	2	5	4
Net value of construction†	5 806 805	3 471 757	3 365 134	1 998 542	1	1	1	2
Value added††	3 605 139	2 091 361	1 916 136	1 200 259	1	1	1	2
Selected costs	4 111 193	2 396 796	2 403 249	1 318 663	2	1	1	2
Materials, components, and supplies ³	2 303 469	1 403 418	1 489 178	852 805	1	1	1	2
Construction work subcontracted to others	1 675 146	889 942	840 349	465 858	3	1	2	3
Selected power, fuels, and lubricants.....	132 577	103 436	73 722	(NA)	2	2	1	(NA)
Electricity.....	15 078	11 080	7 596	(NA)	2	2	2	(NA)
Natural gas.....	6 290	5 896	4 406	(NA)	2	4	3	(NA)
Gasoline and diesel fuel	103 359	77 569	52 643	(NA)	2	2	1	(NA)
On highway use	68 744	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Off highway use	34 614	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Other, including lubricating oils and greases.....	7 848	8 889	9 079	(NA)	3	2	3	(NA)
Rental cost for machinery, equipment, and buildings	99 749	54 810	44 772	(NA)	2	2	1	(NA)
For machinery and equipment	64 993	38 431	35 551	24 165	3	2	1	3
For buildings.....	34 756	16 379	9 222	(NA)	3	3	2	(NA)
Selected purchased services	128 551	77 669	77 432	(NA)	2	1	6	(NA)
Communication services	28 534	20 814	18 269	(NA)	2	2	8	(NA)
Repairs to buildings and other structures	7 255	4 549	3 582	(NA)	10	4	5	(NA)
Repairs to machinery and equipment.....	92 760	52 306	55 582	(NA)	2	2	7	(NA)
Ownership of construction projects:								
Value of construction work	7 481 951	4 361 699	4 205 483	2 464 400	1	1	1	2
Government owned	1 503 252	989 178	710 781	685 104	2	3	1	3
Federal	427 980	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
State and local	1 075 272	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Privately owned	5 978 699	3 372 520	3 494 702	1 779 296	2	1	1	2

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

²Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

³For 1972, includes data for power, fuels, and lubricants.

Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	1 091 416	977 521	2	1
Capital expenditures, other than land -----	162 187	80 237	3	2
New -----	120 299	59 115	3	2
Used -----	41 887	21 121	6	4
Retirements and disposition of depreciable assets -----	46 959	33 118	6	3
End-of-year gross book value of depreciable assets -----	1 206 644	1 024 640	2	2
Depreciation charges during year -----	131 259	122 458	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	195 587	172 118	3	3
Capital expenditures, other than land -----	21 283	10 538	8	3
New buildings and other structures -----	16 344	7 599	9	4
Used buildings and other structures -----	4 938	2 938	18	5
Retirements and disposition of depreciable assets -----	5 867	3 189	16	4
End-of-year gross book value of depreciable assets -----	211 003	179 468	3	2
Depreciation charges during year -----	13 901	13 363	5	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	895 829	805 402	2	2
Capital expenditures, other than land -----	140 903	69 698	3	2
New machinery and equipment, including automobiles and trucks -----	103 954	51 516	3	3
New automobiles and trucks, intended primarily for highway use -----	45 635	19 955	4	4
Used machinery and equipment, including automobiles and trucks -----	36 949	18 182	6	5
Retirements and disposition of depreciable assets -----	41 092	29 929	6	3
End-of-year gross book value of depreciable assets -----	995 640	845 172	2	2
Depreciation charges during year -----	117 358	109 095	2	2

Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	10 731	1
Value of construction work	7 481 951	1
Establishments with inventories:		
Number	(S)	(S)
Value of construction work	(S)	(S)
Inventories¹:		
End of 1987, materials and supplies	(S)	(S)
End of 1986, materials and supplies	(S)	(S)
Establishments with no inventories:		
Number	(S)	(S)
Value of construction work	(S)	(S)
Establishments not reporting:		
Number	(S)	(S)
Value of construction work	(S)	(S)

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1987										
Number of establishments	10 731	6 672	2 333	1 023	510	125	56	9	2	-
All employees**	77 419	13 914	14 935	13 268	15 107	8 409	7 666	4 117	(D)	-
Payroll, all employees	1 750 847	195 330	263 100	287 200	388 471	240 033	240 935	135 778	(D)	-
Construction worker hours (thousands)	105 704	17 500	17 814	17 693	21 452	12 593	11 509	7 140	(D)	-
Dollar value business done	7 749 547	1 118 172	1 262 903	1 151 745	1 601 253	930 354	1 055 585	629 534	(D)	-
Value of construction work†	7 481 951	1 087 062	1 219 241	1 120 986	1 559 994	898 730	1 002 157	593 780	(D)	-
Net value of construction work†	5 806 805	905 040	950 750	935 724	1 204 226	702 055	695 490	413 518	(D)	-
Value added††	3 605 139	505 218	553 749	569 075	751 823	443 552	490 582	291 138	(D)	-
Cost of materials, components, supplies, and fuels	2 436 046	418 825	429 214	392 784	488 625	290 127	258 336	158 134	(D)	-
Cost of construction work subcontracted to others	1 675 146	182 021	268 491	185 262	355 768	196 675	306 667	180 262	(D)	-
Rental cost for machinery, equipment, and buildings	99 749	9 810	12 712	16 790	21 321	12 044	19 263	7 808	(D)	-
Capital expenditures, other than land	162 187	23 700	24 998	26 461	41 411	23 319	14 990	7 306	(D)	-
End-of-year gross book value of depreciable assets	1 206 644	185 607	147 430	205 460	295 313	162 199	113 891	96 742	(D)	-
1982										
All employees**	65 892	13 800	11 966	10 877	12 217	6 661	4 959	2 372	3 038	(D)
Value of construction work†	4 361 699	669 690	570 550	641 712	969 207	601 259	480 147	429 124	(D)	(D)
Value added††	2 091 361	318 707	297 669	330 024	477 554	281 636	227 283	158 487	(D)	(D)
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	1	2	4	3	2	(W)	(W)	(W)	(D)	-
Net value of construction work†	1	3	5	3	2	(W)	(W)	(W)	(D)	-
Capital expenditures, other than land	3	8	11	8	5	4	(W)	(W)	(D)	-

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1987											
Number of establishments	10 731	(S)	(S)	1 660	3 349	1 827	1 271	768	345	144	91
All employees**	77 419	(S)	(S)	3 124	10 220	9 846	11 002	11 802	10 118	7 562	12 354
Payroll, all employees	1 750 847	(S)	(S)	32 313	136 935	163 200	220 060	285 803	273 066	229 851	399 761
Construction worker hours (thousands)	105 704	(S)	(S)	3 453	12 316	12 904	14 466	16 895	13 628	11 160	19 609
Dollar value of business done	7 749 547	(S)	(S)	123 058	547 649	640 353	876 034	1 190 208	1 218 770	984 054	2 134 256
Value of construction work†	7 481 951	(S)	(S)	121 882	536 742	623 335	851 424	1 150 224	1 174 714	947 070	2 041 985
Net value of construction work†	5 806 805	(S)	(S)	115 589	493 769	569 993	728 891	944 610	905 749	676 130	1 339 420
Value added††	3 605 139	(S)	(S)	69 976	289 739	329 621	422 156	581 960	565 654	422 058	903 699
Cost of materials, components, supplies, and fuels	2 436 046	(S)	(S)	46 532	213 556	256 058	329 450	394 290	373 373	810 009	(D)
Cost of construction work subcontracted to others	1 675 146	(S)	(S)	6 292	42 972	53 341	122 532	205 613	268 964	270 940	702 565
Rental cost for machinery, equipment, and buildings	99 749	(S)	(S)	863	5 199	8 419	13 850	14 852	14 650	11 742	29 943
Capital expenditures, other than land	162 187	(S)	(S)	2 637	14 769	15 239	22 939	28 230	25 693	20 703	31 093
End-of-year gross book value of depreciable assets	1 206 644	(S)	(S)	26 445	98 178	126 470	135 750	216 278	173 409	145 562	278 572
1982											
All employees**	65 892	1 647	2 288	4 490	10 421	8 108	7 600	10 289	5 746	5 285	10 016
Value of construction work†	4 361 699	16 205	47 030	141 117	439 798	411 699	461 305	745 754	515 740	540 470	1 042 580
Value added††	2 091 361	9 362	23 270	77 370	229 191	215 220	243 418	380 531	248 455	250 980	413 560
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	1	(S)	(S)	7	4	5	4	3	3	1	(W)
Net value of construction work†	1	(S)	(S)	5	4	5	4	3	5	2	(W)
Capital expenditures, other than land	3	(S)	(S)	15	11	12	11	8	8	4	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work ¹				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction ²	Maintenance and repair				
	A	B	C	D	A	B	C	D
1987								
Value of construction work ¹	7 481 951	4 494 762	1 700 502	961 389	1	2	2	2
Building construction	5 560 093	3 483 178	1 337 933	715 098	2	2	3	2
Single-family houses.....	1 669 005	1 132 214	318 512	218 278	4	6	4	5
Single-family houses, detached.....	1 450 163	958 385	298 784	192 993	4	6	5	5
Single-family houses, attached.....	218 841	173 829	19 727	25 285	11	14	11	19
Apartment buildings with two or more apartments.....	333 116	238 836	64 507	29 772	8	9	21	7
Other residential buildings, including hotels and motels.....	162 735	108 248	28 358	26 128	4	4	10	13
Hotels and motels.....	102 589	78 216	12 565	11 807	3	4	7	6
Other residential buildings, excluding hotels and motels.....	60 146	30 031	15 793	14 321	10	10	17	22
Office buildings.....	668 707	451 102	152 606	64 997	2	2	3	3
Other commercial buildings such as stores, restaurants, and automobile service stations.....	741 957	452 876	205 434	83 646	3	3	3	5
Industrial buildings and warehouses.....	1 171 668	656 432	333 687	181 548	3	3	4	4
Industrial buildings.....	972 804	525 256	283 658	163 890	2	3	3	4
Warehouses.....	198 864	131 176	50 029	17 657	7	7	10	11
Religious buildings.....	90 593	38 907	32 237	19 447	4	6	8	5
Educational buildings.....	202 396	109 913	60 470	32 012	4	5	4	10
Hospitals and institutional buildings.....	299 803	170 454	103 308	26 039	3	3	6	4
Farm buildings.....	93 748	60 022	15 466	18 259	8	11	9	12
Amusement, social, and recreational buildings.....	53 588	34 323	12 719	6 545	2	2	5	5
Other nonresidential buildings.....	48 893	29 851	10 629	8 427	11	15	10	36
Land development for buildings.....	23 884	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
Nonbuilding construction	1 620 445	1 011 584	362 569	246 292	2	2	3	4
Highways, streets, and related facilities.....	647 276	308 284	215 511	123 480	2	2	3	3
Parking areas including private driveways.....	88 266	53 446	19 961	14 858	13	15	15	24
Bridges, tunnels, and elevated highways.....	156 604	122 313	21 151	13 139	1	2	3	4
Tunnels.....	21 917	21 079	(D)	(D)	3	1	(D)	(D)
Bridges and elevated highways.....	134 686	101 234	(D)	(D)	2	2	(D)	(D)
Power and communication transmission lines, towers, and related facilities.....	70 087	50 248	13 595	6 243	6	4	22	13
Sewers, water mains, and related facilities.....	271 928	217 581	31 173	23 172	3	3	9	6
Sewers, sewer lines, and related facilities.....	190 768	153 531	21 773	15 464	3	3	10	7
Water mains and related facilities.....	81 159	64 050	9 400	7 708	5	5	13	7
Pipeline, other than sewer or water lines.....	52 000	32 863	12 712	6 424	7	(W)	14	28
Sewage treatment and water treatment plants.....	94 391	73 566	15 435	5 388	4	4	3	21
Other nonbuilding construction.....	239 893	153 283	33 031	53 588	12	13	17	17
Construction work, n.s.k.	301 413	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
1982								
Value of construction work ¹	4 361 699	3 324 310	(NA)	1 037 389	1	1	(NA)	1
Building construction	3 121 638	2 357 949	(NA)	763 689	1	1	(NA)	1
Single-family houses.....	721 307	507 791	(NA)	213 515	3	3	(NA)	3
Single-family houses, detached.....	626 674	429 862	(NA)	196 812	3	4	(NA)	4
Single-family houses, attached.....	94 632	77 928	(NA)	16 703	5	6	(NA)	8
Apartment buildings with two or more apartments.....	197 912	166 779	(NA)	31 133	5	6	(NA)	6
Other residential buildings, including hotels and motels.....	50 930	37 584	(NA)	13 346	4	4	(NA)	7
Office buildings.....	422 464	324 061	(NA)	98 403	1	1	(NA)	2
Other commercial buildings such as stores, restaurants, and automobile service stations.....	342 984	267 705	(NA)	75 279	2	3	(NA)	4
Industrial buildings and warehouses.....	804 568	597 219	(NA)	207 348	1	1	(NA)	2
Industrial buildings.....	676 424	492 226	(NA)	184 197	1	1	(NA)	2
Warehouses.....	128 144	104 993	(NA)	23 150	2	3	(NA)	3
Religious buildings.....	58 788	37 146	(NA)	21 642	3	2	(NA)	7
Educational buildings.....	147 177	108 765	(NA)	38 412	2	3	(NA)	4
Hospitals and institutional buildings.....	214 499	178 321	(NA)	36 178	1	1	(NA)	3
Farm buildings.....	113 825	93 945	(NA)	19 880	4	5	(NA)	7
Amusement, social, and recreational buildings.....	21 908	18 620	(NA)	3 287	6	8	(NA)	14
Other nonresidential buildings.....	25 276	20 013	(NA)	5 266	11	13	(NA)	19
Nonbuilding construction	995 116	773 161	(NA)	221 955	1	1	(NA)	2
Highways, streets, and related facilities.....	340 143	231 500	(NA)	108 643	2	2	(NA)	4
Bridges, tunnels, and elevated highways.....	138 936	121 267	(NA)	17 668	(W)	(W)	(NA)	3
Power and communication transmission lines, towers, and related facilities.....	33 344	28 090	(NA)	5 254	5	5	(NA)	9
Sewers, water mains, and related facilities.....	166 328	139 440	(NA)	26 887	3	4	(NA)	7
Sewers, sewer lines, and related facilities.....	116 340	99 109	(NA)	17 231	4	5	(NA)	5
Water mains and related facilities.....	49 987	40 330	(NA)	9 656	6	5	(NA)	18
Pipeline, other than sewer or water lines.....	43 520	27 100	(NA)	16 419	5	7	(NA)	1
Blast furnaces, petroleum refineries, and chemical complexes.....	15 113	10 651	(NA)	4 461	7	2	(NA)	22
Power plants.....	93 796	81 460	(NA)	12 335	2	2	(NA)	1
Power plants, nuclear.....	11 725	7 686	(NA)	4 038	12	18	(NA)	1
Power plants, except nuclear.....	82 070	73 774	(NA)	8 296	(W)	(W)	(NA)	1
Sewage treatment and water treatment plants.....	84 741	73 022	(NA)	11 718	2	2	(NA)	3
Sewage treatment plants.....	77 325	67 142	(NA)	10 182	2	2	(NA)	3
Water treatment plants.....	7 416	5 880	(NA)	1 535	4	2	(NA)	13
Other nonbuilding construction.....	79 195	60 630	(NA)	18 570	6	6	(NA)	13
Construction work, n.s.k.	244 944	193 199	(NA)	51 744	4	4	(NA)	6

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

²In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".

Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
		A	B	C	D	E	F	G
	Construction Industries and land subdividers and developers -----	10 731	61 234	105 704	49 009	20 057	62 189	26 777
15, 16, 17	Construction Industries:							
15	Building construction—General contractors and operative builders:							
152	General contractors, residential buildings:							
1521	Single-family houses -----	2 006	6 139	9 962	5 244	1 984	6 237	2 553
1522	Other residential buildings -----	146	1 325	2 043	1 200	468	1 325	509
1531	Operative builders -----	96	459	638	374	130	407	158
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	155	2 258	4 015	1 711	695	2 118	941
1542	Nonresidential buildings, n.e.c. -----	530	5 821	10 626	4 669	1 983	5 734	2 643
16	Heavy construction other than building construction—contractors:							
1611	Highway and street construction -----	219	3 696	6 853	1 333	552	4 364	2 003
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	16	786	1 591	453	225	898	436
1623	Water, sewer, and utility lines -----	171	2 954	5 616	2 134	953	2 972	1 392
1629	Heavy construction, n.e.c. -----	233	1 296	2 027	841	331	1 412	573
17	Special trade contractors:							
1711	Plumbing, heating, and air-conditioning ----	1 551	8 249	15 049	7 602	3 353	8 022	3 623
1721	Painting and paper hanging -----	639	2 392	3 525	1 755	638	2 475	864
1731	Electrical work -----	853	5 527	9 759	5 273	2 181	5 362	2 378
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	482	2 322	3 644	1 807	646	2 278	903
1742	Plastering, drywall, and insulation work --	349	2 087	3 266	2 051	754	2 016	788
1743	Terrazzo, tile, marble, and mosaic work --	50	280	483	224	94	275	117
175	Carpentry and floor work:							
1751	Carpentry -----	795	2 157	3 409	1 920	738	2 277	895
1752	Floor laying and other floor work -----	168	603	929	592	218	613	243
1761	Roofing, siding, and sheet metal work -----	595	3 429	5 498	2 512	986	3 529	1 338
1771	Concrete work -----	630	3 095	5 267	1 897	718	3 401	1 520
1781	Water well drilling -----	75	246	495	203	101	263	130
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	58	659	1 143	509	219	723	306
1793	Glass and glazing work -----	70	558	946	532	226	551	235
1794	Excavation work -----	313	1 632	3 003	1 347	541	1 704	818
1795	Wrecking and demolition work -----	29	114	245	91	47	103	58
1796	Installing building equipment, n.e.c. -----	66	1 449	3 076	1 331	763	1 319	654
1799	Special trade contractors, n.e.c. -----	360	1 652	2 519	1 369	487	1 782	672
6552	Land subdividers and developers, n.e.c. --	66	31	*64	27	*13	*22	*16

¹Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
69 941	31 127	63 796	27 742	1	1	1	1	1	1	1	1	1	1	15, 16, 17
														15
6 930 1 443	2 931 565	6 144 1 333	2 492 500	4 9	6 11	5 10	6 13	4 10	6 13	5 9	6 12	5 7	6 7	152 1521 1522
570	177	485	172	21	32	24	37	22	33	21	31	22	32	1531
														154
2 492 6 674	1 159 3 054	2 710 6 206	1 218 2 944	8 4	7 5	9 4	6 4	9 4	9 6	9 4	9 5	7 3	7 6	1541 1542
														16
5 332	2 571	3 756	1 726	3	3	4	4	3	4	3	3	4	3	1611
														162 1622
995 3 292 1 449	543 1 651 605	797 3 419 1 483	385 1 617 517	3 2 9	3 4 11	2 2 9	2 3 12	5 2 9	3 4 12	4 3 8	4 5 11	2 2 10	1 4 12	1623 1629
														17
8 865	4 110	8 507	3 963	2	2	2	3	2	3	2	2	2	3	1711
3 057	1 111	2 280	910	8	7	7	9	10	8	9	7	7	8	1721
5 829	2 641	5 645	2 557	2	3	2	3	2	3	2	3	2	3	1731
														174
2 694 2 105 319	1 145 846 138	2 510 2 176 304	948 877 132	5 5 8	7 7 6	6 6 10	7 6 6	5 6 9	7 7 7	5 6 8	8 8 7	5 6 8	7 7 7	1741 1742 1743
2 354 667	979 249	2 082 540	796 217	6 12	7 16	7 12	9 16	7 12	8 17	6 13	7 16	6 12	7 16	175 1751 1752
4 038	1 662	3 639	1 510	4	5	5	6	4	5	4	5	5	7	1761
3 877	1 738	3 215	1 290	6	7	10	13	6	7	6	8	6	8	1771
268	135	252	127	12	19	13	19	14	21	13	20	13	18	1781
														179
737 575 1 823 106 1 548 1 843	325 246 894 74 824 720	669 573 1 656 158 1 597 1 620	293 238 748 65 835 639	8 17 8 21 3 10	9 17 10 29 5 13	5 17 8 25 3 11	6 16 10 33 5 15	9 16 8 26 1 10	9 16 10 32 5 14	11 17 8 28 3 10	12 17 10 33 5 13	9 17 8 15 3 10	10 18 11 24 7 13	1791 1793 1794 1795 1796 1799
*49	*20	*28	*13	40	55	36	47	44	60	43	51	44	64	6552

Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	Construction industries and land subdividers and developers -----	7.2	22.6	1 726.2	122.2	.234	.326	.224	.013
15, 16, 17	Construction industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses	3.9	15.7	1 622.7	(D)	(D)	(D)	(D)	(D)
1522	Other residential buildings	11.6	21.0	1 541.9	201.0	.133	.208	.537	.004
1531	Operative builders	7.1	17.9	(S)	(D)	(D)	(D)	(D)	(D)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses	18.3	25.8	1 778.1	163.6	.198	.256	.437	.006
1542	Nonresidential buildings, n.e.c.	14.3	25.6	1 825.5	201.8	.165	.222	.449	.008
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction	20.0	29.2	1 854.2	179.3	.193	.337	.218	.027
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction	61.1	35.3	2 024.2	189.1	.232	(D)	.229	.010
1623	Water, sewer, and utility lines	20.5	27.5	1 901.2	110.8	.294	.304	.092	.027
1629	Heavy construction, n.e.c.	6.9	22.0	1 564.0	133.7	.204	.257	.225	.023
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning	7.2	24.6	1 824.3	114.4	.292	.410	.074	.014
1721	Painting and paper hanging	4.5	16.0	1 473.7	52.6	.370	.223	.040	.018
1731	Electrical work	8.4	25.1	1 765.7	87.6	.370	.401	.016	.010
174	Masonry, stoneowrk, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework	5.5	19.4	1 569.3	67.2	.331	.384	.038	.011
1742	Plastering, drywall, and insulation work	7.3	21.5	1 564.9	80.0	.330	.372	.075	.008
1743	Terrazzo, tile, marble, and mosaic work	7.2	25.8	1 725.0	97.4	.339	.466	.023	.007
175	Carpentry and floor work:								
1751	Carpentry	3.2	16.4	1 580.4	76.0	.256	.399	.118	.008
1752	Floor laying and other floor work	4.4	19.5	1 540.6	84.1	.286	.483	.037	.009
1761	Roofing, siding, and sheet metal work	7.3	18.5	1 603.4	82.9	.280	.424	.044	.015
1771	Concrete work	5.8	18.1	1 701.8	83.4	.258	.386	.052	.018
1781	Water well drilling	4.4	18.3	2 012.2	105.0	.233	.430	.024	*.010
179	Miscellaneous special trade contractors:								
1791	Structural steel erection	13.8	27.0	1 734.4	100.9	.325	.272	.053	.028
1793	Glass and glazing work	11.7	23.4	1 695.3	98.8	.347	.513	.012	.014
1794	Excavation work	6.4	22.7	1 840.1	105.6	.264	.260	.096	.043
1795	Wrecking and demolition work	4.7	16.7	2 149.1	48.1	.414	(D)	(D)	*.065
1796	Installing building equipment, n.e.c.	27.2	35.3	2 122.8	154.0	.284	.210	(D)	.011
1799	Special trade contractors, n.e.c.	5.9	18.0	1 524.8	86.7	.267	.388	.063	.016
6552	Land subdividers and developers, n.e.c. -----	2.1	17.4	*2 064.5	648.7	.121	*.131	.443	.003

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	CHICAGO-GARY-LAKE COUNTY, IL-IN-WI CMSA											
	Construction industries and land subdividers and developers	13 969	167 514	4 588 978	18 684 577	13 696 027	8 985 397	5 058 317	4 988 550	258 689	1	1
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses	1 967	9 781	181 330	1 096 506	722 962	422 518	341 854	373 544	13 780	4	5
1522	Other residential buildings	205	2 151	60 285	321 890	129 224	83 046	58 019	192 666	2 097	7	6
1531	Operative builders	439	4 077	131 430	1 638 360	783 288	434 551	373 285	855 072	26 665	4	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses	235	3 488	108 470	627 801	253 132	159 361	127 588	374 669	2 925	4	4
1542	Nonresidential buildings, n.e.c.	656	16 426	442 295	3 413 653	1 416 569	1 003 036	445 440	1 997 084	17 805	4	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction	204	5 936	192 031	870 027	650 677	431 593	263 317	219 349	25 641	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction	30	1 268	35 015	140 784	107 253	58 550	48 964	33 531	5 780	4	3
1623	Water, sewer, and utility lines	258	5 478	163 860	557 522	476 006	313 282	(D)	81 516	16 996	5	3
1629	Heavy construction, n.e.c.	166	4 812	142 579	726 059	570 850	398 739	184 498	155 210	10 321	2	2
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning	2 001	23 316	711 432	2 154 379	1 925 413	1 184 055	768 069	228 966	26 328	1	1
1721	Painting and paper hanging	828	7 118	156 699	385 321	364 149	290 078	76 615	21 172	4 396	4	3
1731	Electrical work	1 335	20 070	675 615	1 721 968	1 675 937	1 116 904	572 035	46 032	15 389	1	1
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework	672	6 148	148 852	405 511	387 399	272 450	117 125	18 113	6 883	3	3
1742	Plastering, drywall, and insulation work	382	8 025	218 187	543 988	512 942	360 427	165 460	31 046	4 191	2	2
1743	Terrazzo, tile, marble, and mosaic work	110	1 068	30 931	86 657	85 931	53 514	33 190	726	1 291	5	5
175	Carpentry and floor work:											
1751	Carpentry	1 065	9 923	234 348	724 123	656 866	409 811	253 027	67 256	6 105	3	2
1752	Floor laying and other floorwork	243	2 289	57 540	211 030	196 586	114 718	86 285	14 444	1 870	5	4
1761	Roofing, siding, and sheet metal work	808	8 512	195 939	660 745	616 722	387 668	236 033	44 023	8 906	3	2
1771	Concrete work	876	11 180	264 327	999 186	892 839	539 818	359 679	106 346	22 698	2	2
1781	Water well drilling	36	338	8 636	31 865	31 388	18 931	(D)	477	2 769	2	3
179	Miscellaneous special trade contractors:											
1791	Structural steel erection	118	2 217	65 336	189 095	171 136	128 737	51 588	17 959	2 029	3	3
1793	Glass and glazing work	105	1 169	31 609	98 490	94 309	54 759	43 384	4 181	2 344	8	4
1794	Excavation work	294	2 537	74 131	282 428	255 182	201 698	59 607	27 246	20 509	5	4
1795	Wrecking and demolition work	72	715	22 256	73 232	70 599	67 259	4 459	2 633	2 299	5	3
1796	Installing building equipment, n.e.c.	142	3 295	102 999	275 589	254 977	191 197	73 376	20 613	1 441	4	2
1799	Special trade contractors, n.e.c.	526	5 365	114 075	364 414	343 996	237 763	118 777	20 418	5 175	5	4
6552	Land subdividers and developers, n.e.c.	198	813	18 771	83 953	49 696	50 934	10 018	34 258	2 060	8	11
	AURORA-ELGIN, IL PMSA											
	Construction industries and land subdividers and developers	829	7 281	181 762	737 670	579 281	375 721	224 658	158 389	17 714	3	3
	(See appropriate State for SIC detail.)											
	CHICAGO, IL PMSA											
	Construction industries and land subdividers and developers	9 918	128 485	3 598 988	15 065 422	10 779 420	7 080 204	3 958 061	4 286 002	192 799	1	1
	(See appropriate State for SIC detail.)											
	GARY-HAMMOND, IN PMSA											
	Construction industries and land subdividers and developers	887	11 173	294 825	913 538	754 038	524 658	255 823	159 500	10 514	2	2
	(See appropriate State for SIC detail.)											

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	JOLIET, IL PMSA											
	Construction industries and land subdividers and developers	878	8 171	219 418	745 524	621 815	403 190	230 669	123 709	13 010	2	2
	(See appropriate State for SIC detail.)											
	KENOSHA, WI PMSA											
	Construction industries and land subdividers and developers	212	1 792	42 656	142 091	115 591	74 906	46 737	26 500	3 126	6	6
	Construction Industries:											
	Building construction—General contractors and operative builders:											
	General contractors, residential buildings:											
	Single-family houses	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Other residential buildings	-	-	-	-	-	-	-	-	-	-	-
	Operative builders	-	-	-	-	-	-	-	-	-	-	-
	General contractors, nonresidential buildings:											
	Industrial buildings and warehouses	*11	60	(D)	(D)	(D)	1 558	1 980	(D)	(D)	13	(D)
	Nonresidential buildings, n.e.c.	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Heavy construction other than building construction—contractors:											
	Highway and street construction	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction	-	-	-	-	-	-	-	-	-	-	-
	Water, sewer, and utility lines	5	37	900	4 493	3 495	2 592	903	*998	*288	35	28
	Heavy construction, n.e.c.	5	30	462	1 510	(D)	1 053	392	(D)	(D)	2	(D)
	Special trade contractors:											
	Plumbing, heating, and air- conditioning	28	339	10 048	29 133	26 392	12 850	13 904	2 741	*341	8	9
	Painting and paper hanging	7	169	3 155	7 429	6 948	5 734	(D)	481	28	15	12
	Electrical work	12	126	3 893	7 992	(D)	5 261	2 635	(D)	(D)	6	(D)
	Masonry, stonework, tile setting, and plastering:											
	Masonry, stone setting, and other stonework	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Plastering, drywall, and insulation work	8	26	629	1 850	(D)	1 039	760	(D)	*39	20	(D)
	Terrazzo, tile, marble, and mosaic work	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Carpentry and floor work:											
	Carpentry	23	*57	845	*4 742	*4 128	*2 367	(D)	(S)	(S)	55	57
	Floor laying and other floorwork	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Roofing, siding, and sheet metal work	14	48	636	2 713	2 683	1 348	1 335	30	*73	31	33
	Concrete work	17	95	1 804	7 516	7 370	3 926	3 444	146	(S)	9	4
	Water well drilling	-	-	-	-	-	-	-	-	-	-	-
	Miscellaneous special trade contractors:											
	Structural steel erection	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Glass and glazing work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Excavation work	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	Wrecking and demolition work	-	-	-	-	-	-	-	-	-	-	-
	Installing building equipment, n.e.c.	*7	217	8 842	20 500	(D)	15 767	4 518	(D)	-	20	(D)
	Special trade contractors, n.e.c.	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
6552	Land subdividers and developers, n.e.c.	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	LAKE COUNTY, IL PMSA											
	Construction industries and land subdividers and developers	1 245	10 612	251 329	1 080 332	845 882	526 718	342 369	234 450	21 526	2	2
	(See appropriate State for SIC detail.)											

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	MILWAUKEE-RACINE, WI CMSA											
	Construction Industries and land subdividers and developers	3 147	27 290	683 281	2 770 064	2 135 519	1 411 718	842 369	634 545	60 227	1	1
	Construction Industries:											
	Building construction—General contractors and operative builders:											
	General contractors, residential buildings:											
	Single-family houses	384	1 705	31 704	222 661	120 643	72 365	52 310	102 018	2 281	8	14
	Other residential buildings	50	675	14 494	113 603	50 487	33 658	22 739	63 116	1 217	9	11
	Operative builders	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	General contractors, nonresidential buildings:											
	Industrial buildings and warehouses	50	670	19 317	108 421	50 812	32 867	20 797	57 608	*1 302	10	10
	Nonresidential buildings, n.e.c.	144	2 441	69 543	448 649	225 486	193 161	74 273	223 163	4 286	3	2
	Heavy construction other than building construction—contractors:											
	Highway and street construction	57	1 230	41 591	213 724	154 736	88 083	(D)	58 989	8 517	4	4
	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction	5	298	12 826	31 413	27 071	17 959	(D)	4 342	(D)	(W)	(W)
	Water, sewer, and utility lines	53	1 652	46 816	162 324	148 110	97 236	(D)	14 213	9 915	1	1
	Heavy construction, n.e.c.	33	294	7 257	31 976	26 419	15 583	11 144	5 557	1 326	17	10
	Special trade contractors:											
	Plumbing, heating, and air- conditioning	425	4 005	107 191	372 080	346 154	217 481	143 507	25 926	5 361	3	2
	Painting and paper hanging	256	1 139	20 605	57 523	55 489	42 831	13 376	2 034	1 779	9	11
	Electrical work	249	2 951	82 197	211 808	207 456	133 071	79 940	4 352	3 665	3	2
	Masonry, stonework, tile setting, and plastering:											
	Masonry, stone setting, and other stonework	168	1 356	28 582	85 147	80 611	49 488	32 600	4 535	1 880	6	6
	Plastering, drywall, and insulation work	106	933	21 856	69 412	64 460	41 227	24 594	4 952	504	8	13
	Terrazzo, tile, marble, and mosaic work	22	206	6 316	16 276	(D)	8 165	7 702	(D)	132	10	(D)
	Carpentry and floor work:											
	Carpentry	272	890	17 820	58 674	52 916	33 336	19 978	5 758	763	8	8
	Floor laying and other floorwork	74	402	8 513	28 561	26 957	14 623	(D)	1 604	289	15	14
	Roofing, siding, and sheet metal work	240	1 978	39 065	152 165	143 349	81 808	64 322	8 816	2 659	5	7
	Concrete work	181	1 257	26 150	92 626	86 920	57 893	30 525	5 706	3 521	9	10
	Water well drilling	14	105	2 714	8 724	(D)	5 094	3 430	(D)	(D)	4	(D)
	Miscellaneous special trade contractors:											
	Structural steel erection	17	304	7 647	23 849	22 796	17 996	(D)	1 053	722	4	2
	Glass and glazing work	21	316	7 535	20 538	20 335	13 692	11 263	203	257	6	6
	Excavation work	83	522	13 751	55 272	50 679	34 543	(D)	4 593	3 601	10	8
	Wrecking and demolition work	*16	73	1 218	2 540	2 387	2 271	(D)	153	(D)	10	5
	Installing building equipment, n.e.c.	22	630	24 702	49 721	48 486	42 897	(D)	1 235	528	(W)	(W)
	Special trade contractors, n.e.c.	148	990	18 678	60 420	56 434	40 326	21 059	3 986	1 110	15	15
6552	Land subdividers and developers, n.e.c.	*20	38	*1 104	*13 811	(S)	*7 248	*347	*6 918	(D)	35	(S)
15,16, 17	MILWAUKEE, WI PMSA											
	Construction Industries and land subdividers and developers	2 787	24 904	627 668	2 530 358	1 952 627	1 312 607	755 731	577 731	53 541	1	1
	Construction Industries:											
	Building construction—General contractors and operative builders:											
	General contractors, residential buildings:											
	Single-family houses	333	1 515	29 253	211 275	111 739	67 624	48 019	99 536	2 016	9	15
	Other residential buildings	47	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Operative builders	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	General contractors, nonresidential buildings:											
	Industrial buildings and warehouses	47	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nonresidential buildings, n.e.c.	134	2 294	65 022	420 793	211 738	183 256	(D)	209 055	3 957	3	3

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
											B	E
	MILWAUKEE, WI PMSA—Con.											
	Construction Industries and land subdividers and developers—Con.											
15,16, 17 16	Construction Industries—Con. Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	50	996	32 858	(D)	(D)	80 105	(D)	(D)	5 465	5	(D)
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	5	298	12 826	31 413	27 071	17 959	(D)	4 342	(D)	(W)	(W)
1623	Water, sewer, and utility lines -----	46	1 565	44 694	152 874	139 377	92 099	(D)	13 496	9 410	2	2
1629	Heavy construction, n.e.c. -----	28	272	6 867	29 570	24 272	14 355	(D)	5 298	1 256	19	10
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning -----	387	3 679	98 230	344 370	321 957	203 062	132 905	22 414	4 813	3	3
1721	Painting and paper hanging -----	228	1 046	18 961	53 233	51 277	39 886	12 109	1 956	(D)	10	12
1731	Electrical work -----	223	2 726	76 369	195 726	191 650	123 778	73 427	4 077	(D)	3	3
174 1741	Masonry, stonework, tile setting, and plastering: Masonry, stone setting, and other stonework -----	158	1 292	27 394	(D)	(D)	47 599	31 411	(D)	1 733	6	(D)
1742	Plastering, drywall, and insulation work -----	81	815	19 813	64 400	(D)	38 369	22 482	(D)	474	8	(D)
1743	Terrazzo, tile, marble, and mosaic work -----	21	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175 1751 1752	Carpentry and floor work: Carpentry ----- Floor laying and other floorwork-----	255 66	821 386	16 953 8 260	54 959 27 869	49 637 (D)	31 772 14 070	18 263 (D)	5 322 (D)	726 212	8 16	8 (D)
1761	Roofing, siding, and sheet metal work -----	198	1 771	35 535	132 125	125 553	73 291	54 451	6 572	2 417	5	7
1771	Concrete work -----	158	1 147	24 187	85 189	79 527	54 171	(D)	5 662	3 207	10	10
1781	Water well drilling -----	13	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	17	304	7 647	23 849	22 796	17 996	(D)	1 053	722	4	2
1793	Glass and glazing work -----	18	(D)	(D)	19 380	(D)	(D)	10 815	(D)	(D)	(D)	(D)
1794	Excavation work -----	64	458	12 172	49 223	44 741	30 298	(D)	4 482	3 048	11	9
1795	Wrecking and demolition work -----	*16	73	1 218	2 540	2 387	2 271	(D)	153	(D)	10	5
1796	Installing building equipment, n.e.c. -----	20	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c. -----	122	850	16 006	51 447	47 787	35 303	(D)	*3 660	1 030	17	17
6552	Land subdividers and developers, n.e.c. -----	*19	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	RACINE, WI PMSA											
	Construction Industries and land subdividers and developers -----	360	2 386	55 614	239 706	182 892	99 111	86 639	56 814	6 686	4	4
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	51	190	2 451	11 386	8 904	4 741	4 291	2 482	*265	25	22
1522	Other residential buildings -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1531	Operative builders -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1542	Nonresidential buildings, n.e.c. -----	10	148	4 521	27 856	13 748	9 905	(D)	14 108	329	(W)	(W)
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	7	234	8 733	(D)	(D)	7 978	21 693	(D)	3 052	3	(D)
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines -----	7	87	2 122	9 450	8 733	5 137	(D)	717	505	(W)	(W)
1629	Heavy construction, n.e.c. -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	RACINE, WI MSA—Con.											
	Construction industries and land subdividers and developers—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning -----	38	326	8 961	27 709	24 197	14 418	10 602	3 512	548	7	7
1721	Painting and paper hanging -----	28	93	1 644	4 290	4 212	2 945	1 267	*78	(D)	14	12
1731	Electrical work -----	26	225	5 828	16 081	15 806	9 293	6 513	275	(D)	8	7
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	*10	64	1 188	(D)	(D)	1 889	1 189	(D)	*147	34	(D)
1742	Plastering, drywall, and insulation work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1743	Terrazzo, tile, marble, and mosaic work -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	*17	*69	*867	3 715	3 279	1 564	*1 715	436	37	48	39
1752	Floor laying and other floorwork -----	8	16	253	692	(D)	553	136	(D)	77	(W)	(D)
1761	Roofing, siding, and sheet metal work -----	42	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1771	Concrete work -----	23	111	1 963	7 437	7 393	3 722	(D)	*44	*315	19	22
1781	Water well drilling -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	-	-	-	-	-	-	-	-	-	-	-
1793	Glass and glazing work -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1794	Excavation work -----	18	64	1 579	6 050	5 938	4 245	1 741	*111	553	2	3
1795	Wrecking and demolition work -----	-	-	-	-	-	-	-	-	-	-	-
1796	Installing building equipment, n.e.c. -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c. -----	*26	141	2 672	8 973	8 647	5 023	(D)	326	80	34	33
6552	Land subdividers and developers, n.e.c. -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	MINNEAPOLIS-ST. PAUL, MN-WI MSA											
	Construction industries and land subdividers and developers -----	5 428	59 209	1 595 947	7 427 313	5 286 727	3 265 100	2 176 789	2 140 586	110 882	1	1
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	933	4 050	81 449	493 007	335 176	187 096	161 257	157 831	6 011	5	6
1522	Other residential buildings -----	80	892	28 332	266 913	123 003	65 473	61 048	143 911	1 485	8	7
1531	Operative builders -----	228	1 746	48 770	640 860	363 433	190 923	179 429	277 427	5 106	7	8
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	64	1 090	28 744	222 387	150 103	86 571	64 595	72 284	601	8	5
1542	Nonresidential buildings, n.e.c. -----	316	6 105	159 178	1 413 330	444 302	229 234	251 609	969 028	8 916	3	3
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	81	4 261	132 436	750 528	579 960	406 645	193 930	170 567	15 625	2	1
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	5	472	14 251	45 754	40 912	16 221	24 691	*4 842	*232	2	27
1623	Water, sewer, and utility lines -----	146	2 399	66 969	318 718	258 540	161 556	98 251	60 178	11 950	4	3
1629	Heavy construction, n.e.c. -----	77	1 558	47 508	175 607	136 207	68 877	68 268	39 400	5 467	3	3

Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added‡	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	MINNEAPOLIS-ST. PAUL, MN-WI MSA—Con.											
15,16, 17	Construction industries and land subdividers and developers—Con. Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	594	8 276	256 701	819 778	716 621	432 192	295 096	103 157	10 550	2	2
1721	Painting and paper hanging-----	283	2 068	45 020	118 753	110 785	84 474	26 943	7 968	1 950	6	4
1731	Electrical work-----	445	6 199	199 806	518 149	508 278	318 933	196 097	9 871	6 697	2	1
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	250	1 944	45 753	142 066	136 779	82 558	(D)	5 287	2 239	5	4
1742	Plastering, drywall, and insulation work-----	202	2 506	65 428	216 430	192 792	128 570	(D)	23 638	3 158	4	3
1743	Terrazzo, tile, marble, and mosaic work-----	62	579	14 737	46 203	43 835	32 099	18 686	2 368	710	10	7
175	Carpentry and floor work:											
1751	Carpentry-----	389	2 649	49 532	147 421	129 800	80 240	53 533	17 621	1 620	8	6
1752	Floor laying and other floorwork-----	82	789	18 083	63 519	61 293	40 183	22 503	2 225	408	8	5
1761	Roofing, siding, and sheet metal work-----	240	2 194	52 967	177 409	164 460	97 867	72 399	12 949	2 448	5	5
1771	Concrete work-----	315	2 903	71 656	261 884	243 621	158 576	88 747	18 262	5 027	6	7
1781	Water well drilling-----	52	308	6 496	25 305	24 292	15 835	8 937	*1 013	2 736	15	12
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	53	1 256	38 645	110 877	107 215	76 867	31 759	3 662	1 428	3	8
1793	Glass and glazing work-----	55	685	17 034	63 294	60 914	34 330	32 334	2 380	760	8	4
1794	Excavation work-----	139	1 351	38 667	155 802	140 035	105 433	37 440	15 767	13 201	6	5
1795	Wrecking and demolition work-----	4	*101	*1 171	*5 229	*4 922	*3 470	(S)	307	-	62	64
1796	Installing building equipment, n.e.c.-----	40	784	24 121	71 878	69 688	47 581	22 992	2 190	399	3	2
1799	Special trade contractors, n.e.c.-----	236	1 779	36 178	118 982	113 196	86 164	41 324	5 786	2 003	9	9
6552	Land subdividers and developers, n.e.c.-----	57	266	6 315	37 231	26 564	27 131	578	10 667	158	31	19

APPENDIX A.

Explanation of Terms

Construction—Is composed of three broad categories:

1. **New construction**—Includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators, and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations or reconstruction**—Includes construction activity making structural changes to existing facilities. Generally, this type of activity is considered a capital investment in the property.
3. **Maintenance and repair**—Includes construction done for the purpose of upkeep of property rather than additional investment in the property.

Examples of the general distinction between maintenance and repair and reconstruction are provided here: roof repairs, including the replacement of shingles, gutters, etc., are classified under maintenance and repairs. A complete reroofing, however, is classified as reconstruction.

Number of establishments in business during year—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees—Comprise all full-time and part-time employees on the payrolls of construction establishments, who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers—Includes all workers up through the working foreman level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment

operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working foreman level.

Construction worker hours—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1987.

Payroll—Includes the gross earnings paid in the calendar year 1987 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Employer costs for fringe benefits (supplemental labor costs)—Represents expenditures made by the employer during 1987 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions—Include Social Security contributions, unemployment compensation, workman's compensation, and State temporary disability payments.

Voluntary payments—Include life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done—Includes all value of construction work done during 1987 for construction work performed by general contractors, special trades contractors, subcontractors, and land development and improvement work. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include the value of buildings and other structures built or being built for sale in 1987 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators, etc., were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Land receipts—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in the value of construction work done.)

Other business receipts—Includes business receipts not reported as value of construction work done or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work—Derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added—Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted to others, and costs for materials, components, supplies and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, land receipts are also subtracted from dollar value of business done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs—Represents the costs for materials, components, and supplies; costs for construction work subcontracted to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1987 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)
- freight and other direct charges should represent only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, are included in this item as are costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment, such as printing presses; computer systems; etc., which are not an integral part of a structure
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted to others include:

- all costs during 1987 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- The costs to the reporting establishment for its purchases of materials, components, and supplies, provided to a subcontractor for his use. Such costs are reported under a separate category, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal and coke products, etc.

Rental costs for machinery, equipment, and buildings—Includes all costs during 1987 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It

excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services—Includes all costs during 1987 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies, or from other establishments of the same company. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property, or the cost of adapting it for another use. Such costs are included in "capital expenditures".

Assets and depreciation—Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and, (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1987.

Capital expenditures—Refers to all costs actually incurred during 1987 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1987.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories—Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to report work in progress and finished units not sold for buildings and other structures built for sale.

Inventories of multi-establishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects—This item shows the distribution of the value of construction work done by ownership of the project, that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal, and State and local governments.

Value of construction work subcontracted in from others—Includes the value of construction work during 1987 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1987. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose, i.e., office and residential, or commercial, they were to classify the building by major purpose.

In addition all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (include townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures containing two or more housing units (excluding attached single-family houses and townhouses described above).
- **Hotels and motels**—Includes hotels, motels, and tourist cabins intended for transient accommodations.

- **Other residential buildings**—Includes dormitories, fraternity and sorority houses, nurses homes, and other nonhousekeeping residential structures.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more.
- **Other commercial buildings, such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are not included in this category, but under nonbuilding construction.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes nonresidential buildings which are not classified elsewhere, such as fire stations, prisons, civic centers, bus and air passenger terminals and hangars.

Nonbuilding construction:

- **Highways, streets and related work, such as installation of guardrails, highway signs, etc.**—Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control and lighting. Also includes earthwork protective structures when used in connection with road improvements.
- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Recreational facilities**—Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Bridges and elevated highways**—Includes viaducts and overpasses; roads, highways, railroads, and causeways built on structural supports.
- **Tunnels**—Includes highway, pedestrian, and railroad tunnels.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, levees, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities**—Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants, and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers, and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.

- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipples and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.

APPENDIX B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Powerline Construction	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified
		6552	LAND SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES

APPENDIX C.

Regions, Census Divisions, and States

NORTHEAST

New England States

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Middle Atlantic States

New Jersey
New York
Pennsylvania

MIDWEST

East North Central States

Illinois
Indiana
Michigan
Ohio
Wisconsin

West North Central States

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH

South Atlantic States

Delaware
District of Columbia
Florida
Georgia
Maryland

South Atlantic States—Con.

North Carolina
South Carolina
Virginia
West Virginia

East South Central States

Alabama
Kentucky
Mississippi
Tennessee

West South Central States

Arkansas
Louisiana
Oklahoma
Texas

WEST

Mountain States

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

Pacific States

Alaska
California
Hawaii
Oregon
Washington

APPENDIX D.

Metropolitan Statistical Areas

[Titles and definitions shown for MSA's, PMSA's, and CMSA's are those established by the Office of Management and Budget, as of June 30, 1987]

Abilene, TX MSA

Taylor County, TX

Akron, OH PMSA—see Cleveland-Akron-Lorain, OH CMSA

Albany, GA MSA

Dougherty County, GA

Lee County, GA

Albany-Schenectady-Troy, NY MSA

Albany County, NY

Greene County, NY

Montgomery County, NY

Rensselaer County, NY

Saratoga County, NY

Schenectady County, NY

Albuquerque, NM MSA

Bernalillo County, NM

Alexandria, LA MSA

Rapides Parish, LA

Allentown-Bethlehem, PA-NJ MSA

Warren County, NJ

Carbon County, PA

Lehigh County, PA

Northampton County, PA

Altoona, PA MSA

Blair County, PA

Amarillo, TX MSA

Potter County, TX

Randall County, TX

Anaheim-Santa Ana, CA PMSA—see Los Angeles-Anaheim-Riverside, CA CMSA

Anchorage, AK MSA

Anchorage Borough, AK

Anderson, IN MSA

Madison County, IN

Anderson, SC MSA

Anderson County, SC

Ann Arbor, MI PMSA—see Detroit-Ann Arbor, MI CMSA

Anniston, AL MSA

Calhoun County, AL

Appleton-Oshkosh-Neenah, WI MSA

Calumet County, WI

Outagamie County, WI

Winnebago County, WI

Asheville, NC MSA

Buncombe County, NC

Athens, GA MSA

Clarke County, GA

Jackson County, GA

Madison County, GA

Oconee County, GA

Atlanta, GA MSA

Barrow County, GA

Butts County, GA

Cherokee County, GA

Clayton County, GA

Cobb County, GA

Coweta County, GA

De Kalb County, GA

Douglas County, GA

Atlanta, GA MSA—Con.

Fayette County, GA

Forsyth County, GA

Fulton County, GA

Gwinnett County, GA

Henry County, GA

Newton County, GA

Paulding County, GA

Rockdale County, GA

Spalding County, GA

Walton County, GA

Atlantic City, NJ MSA

Atlantic County, NJ

Cape May County, NJ

Augusta, GA-SC MSA

Columbia County, GA

McDuffie County, GA

Richmond County, GA

Aiken County, SC

Aurora-Elgin, IL PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA

Austin, TX MSA

Hays County, TX

Travis County, TX

Williamson County, TX

Bakersfield, CA MSA

Kern County, CA

Baltimore, MD MSA

Anne Arundel County, MD

Baltimore County, MD

Carroll County, MD

Harford County, MD

Howard County, MD

Queen Anne's County, MD

Baltimore city, MD

Bangor, ME MSA

Penobscot County, ME (part)

Bangor city, ME

Brewer city, ME

Eddington town, ME

Glenburn town, ME

Hampden town, ME

Hermon town, ME

Holden town, ME

Kenduskeag town, ME

Old Town city, ME

Orono town, ME

Orrington town, ME

Penobscot Indian Island Indian Reservation, ME

Veazie town, ME

Waldo County, ME (part)

Winterport town, ME

Baton Rouge, LA MSA

Ascension Parish, LA

East Baton Rouge Parish, LA

Livingston Parish, LA

West Baton Rouge Parish, LA

Battle Creek, MI MSA

Calhoun County, MI

Beaumont-Port Arthur, TX MSA

Hardin County, TX

Jefferson County, TX

Orange County, TX

Beaver County, PA PMSA—see Pittsburgh-Beaver Valley, PA CMSA

Bellingham, WA MSA

Whatcom County, WA

Benton Harbor, MI MSA

Berrien County, MI

Bergen-Passaic, NJ PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA

Billings, MT MSA

Yellowstone County, MT

Biloxi-Gulfport, MS MSA

Hancock County, MS

Harrison County, MS

Binghamton, NY MSA

Broome County, NY

Tioga County, NY

Birmingham, AL MSA

Blount County, AL

Jefferson County, AL

St. Clair County, AL

Shelby County, AL

Walker County, AL

Bismarck, ND MSA

Burleigh County, ND

Morton County, ND

Bloomington, IN MSA

Monroe County, IN

Bloomington-Normal, IL MSA

McLean County, IL

Boise City, ID MSA

Ada County, ID

Boston, MA PMSA—see Boston-Lawrence-Salem, MA-NH CMSA

Boston-Lawrence-Salem, MA-NH CMSA

Boston, MA PMSA

Bristol County, MA (part)

Mansfield town, MA

Norton town, MA

Raynham town, MA

Essex County, MA (part)

Lynn city, MA

Lynnfield town, MA

Nahant town, MA

Saugus town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA

Boston-Lawrence-Salem, MA-NH CMSA—Con.

Boston, MA PMSA—Con.

Middlesex County, MA (part)—Con.

Everett city, MA
 Framingham town, MA
 Groton town, MA
 Holliston town, MA
 Hopkinton town, MA
 Hudson town, MA
 Lexington town, MA
 Lincoln town, MA
 Littleton town, MA
 Malden city, MA
 Marlborough city, MA
 Maynard town, MA
 Medford city, MA
 Melrose city, MA
 Natick town, MA
 Newton city, MA
 North Reading town, MA
 Reading town, MA
 Sherborn town, MA
 Shirley town, MA
 Somerville city, MA
 Stoneham town, MA
 Stow town, MA
 Sudbury town, MA
 Townsend town, MA
 Wakefield town, MA
 Waltham city, MA
 Watertown town, MA
 Wayland town, MA
 Weston town, MA
 Wilmington town, MA
 Winchester town, MA
 Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA
 Braintree town, MA
 Brookline town, MA
 Canton town, MA
 Cohasset town, MA
 Dedham town, MA
 Dover town, MA
 Foxborough town, MA
 Franklin town, MA
 Holbrook town, MA
 Medfield town, MA
 Medway town, MA
 Millis town, MA
 Milton town, MA
 Needham town, MA
 Norfolk town, MA
 Norwood town, MA
 Quincy city, MA
 Randolph town, MA
 Sharon town, MA
 Stoughton town, MA
 Walpole town, MA
 Wellesley town, MA
 Westwood town, MA
 Weymouth town, MA
 Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA
 Duxbury town, MA
 Hanover town, MA
 Hanson town, MA
 Hingham town, MA
 Hull town, MA

Boston-Lawrence-Salem, MA-NH CMSA—Con.

Boston, MA PMSA—Con.

Plymouth County, MA (part)—Con.

Kingston town, MA
 Lakeville town, MA
 Marshfield town, MA
 Middleborough town, MA
 Norwell town, MA
 Pembroke town, MA
 Plymouth town, MA
 Plympton town, MA
 Rockland town, MA
 Scituate town, MA

Suffolk County, MA (part)

Boston city, MA
 Chelsea city, MA
 Revere city, MA
 Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA
 Bolton town, MA
 Harvard town, MA
 Hopedale town, MA
 Lancaster town, MA
 Mendon town, MA
 Milford town, MA
 Southborough town, MA
 Upton town, MA

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA
 Bridgewater town, MA
 Brockton city, MA
 East Bridgewater town, MA
 Halifax town, MA
 West Bridgewater town, MA
 Whitman town, MA

Lawrence-Haverhill, MA-NH PMSA

Essex County, MA (part)

Amesbury town, MA
 Andover town, MA
 Boxford town, MA
 Georgetown town, MA
 Groveland town, MA
 Haverhill city, MA
 Lawrence city, MA
 Merrimac town, MA
 Methuen town, MA
 Newbury town, MA
 Newburyport city, MA
 North Andover town, MA
 Salisbury town, MA
 West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH
 Brentwood town, NH
 Danville town, NH
 Derry town, NH
 East Kingston town, NH
 Hampstead town, NH
 Kingston town, NH
 Newton town, NH
 Plaistow town, NH
 Salem town, NH
 Sandown town, NH
 Seabrook town, NH
 Windham town, NH

Boston-Lawrence-Salem, MA-NH CMSA—Con.

Lowell, MA-NH PMSA

Middlesex County, MA (part)

Billerica town, MA
 Chelmsford town, MA
 Dracut town, MA
 Dunstable town, MA
 Lowell city, MA
 Pepperell town, MA
 Tewksbury town, MA
 Tyngsborough town, MA
 Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

Nashua, NH PMSA

Hillsborough County, NH (part)

Amherst town, NH
 Brookline town, NH
 Hollis town, NH
 Hudson town, NH
 Litchfield town, NH
 Merrimack town, NH
 Milford town, NH
 Mont Vernon town, NH
 Nashua city, NH
 Wilton town, NH

Rockingham County, NH (part)

Londonderry town, NH

Salem-Gloucester, MA PMSA

Essex County, MA (part)

Beverly city, MA
 Danvers town, MA
 Essex town, MA
 Gloucester city, MA
 Hamilton town, MA
 Ipswich town, MA
 Manchester town, MA
 Marblehead town, MA
 Middleton town, MA
 Peabody city, MA
 Rockport town, MA
 Rowley town, MA
 Salem city, MA
 Swampscott town, MA
 Topsfield town, MA
 Wenham town, MA

Boulder-Longmont, CO PMSA—see Denver-Boulder, CO CMSA**Bradenton, FL MSA**

Manatee County, FL

Brazoria, TX PMSA—see Houston-Galveston-Brazoria, TX CMSA**Bremerton, WA MSA**

Kitsap County, WA

Bridgeport-Milford, CT PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**Bristol, CT PMSA—see Hartford-New Britain-Middletown, CT CMSA****Brockton, MA PMSA—see Boston-Lawrence-Salem, MA-NH CMSA****Brownsville-Harlingen, TX MSA**

Cameron County, TX

Bryan-College Station, TX MSA

Brazos County, TX

Buffalo, NY PMSA—see Buffalo-Niagara Falls, NY CMSA

Buffalo-Niagara Falls, NY CMSA

Buffalo, NY PMSA
 Erie County, NY
 Niagara Falls, NY PMSA
 Niagara County, NY

Burlington, NC MSA

Alamance County, NC

Burlington, VT MSA

Chittenden County, VT (part)
 Burlington city, VT
 Charlotte town, VT
 Colchester town, VT
 Essex Junction village, VT
 Essex town balance, VT
 Hinesburg town, VT
 Jericho town, VT
 Jericho village, VT
 Milton town, VT
 Milton village, VT
 Richmond town, VT
 Richmond village, VT
 St. George town, VT
 Shelburne town, VT
 South Burlington city, VT
 Williston town, VT
 Winooski city, VT
 Franklin County, VT (part)
 Georgia town, VT
 Grand Isle town, VT
 South Hero town, VT

Canton, OH MSA

Carroll County, OH
 Stark County, OH

Casper, WY MSA

Natrona County, WY

Cedar Rapids, IA MSA

Linn County, IA

Champaign-Urbana-Rantoul, IL MSA

Champaign County, IL

Charleston, SC MSA

Berkeley County, SC
 Charleston County, SC
 Dorchester County, SC

Charleston, WV MSA

Kanawha County, WV
 Putnam County, WV

Charlotte-Gastonia-Rock Hill, NC-SC MSA

Cabarrus County, NC
 Gaston County, NC
 Lincoln County, NC
 Mecklenburg County, NC
 Rowan County, NC
 Union County, NC
 York County, SC

Charlottesville, VA MSA

Albemarle County, VA
 Fluvanna County, VA
 Greene County, VA
 Charlottesville city, VA

Chattanooga, TN-GA MSA

Catoosa County, GA
 Dade County, GA
 Walker County, GA
 Hamilton County, TN
 Marion County, TN
 Sequatchie County, TN

Cheyenne, WY MSA

Laramie County, WY

Chicago, IL PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA**Chicago-Gary-Lake County, IL-IN-WI CMSA**

Aurora-Elgin, IL PMSA
 Kane County, IL
 Kendall County, IL
 Chicago, IL PMSA
 Cook County, IL
 Du Page County, IL
 McHenry County, IL
 Gary-Hammond, IN PMSA
 Lake County, IN
 Porter County, IN
 Joliet, IL PMSA
 Grundy County, IL
 Will County, IL
 Kenosha, WI PMSA
 Kenosha County, WI
 Lake County, IL PMSA
 Lake County, IL

Chico, CA MSA

Butte County, CA

Cincinnati, OH-KY-IN PMSA—see Cincinnati-Hamilton, OH-KY-IN CMSA**Cincinnati-Hamilton, OH-KY-IN CMSA**

Cincinnati, OH-KY-IN PMSA
 Dearborn County, IN
 Boone County, KY
 Campbell County, KY
 Kenton County, KY
 Clermont County, OH
 Hamilton County, OH
 Warren County, OH
 Hamilton-Middletown, OH PMSA
 Butler County, OH

Clarksville-Hopkinsville, TN-KY MSA

Christian County, KY
 Montgomery County, TN

Cleveland, OH PMSA—see Cleveland-Akron-Lorain, OH CMSA**Cleveland-Akron-Lorain, OH CMSA**

Akron, OH PMSA
 Portage County, OH
 Summit County, OH
 Cleveland, OH PMSA
 Cuyahoga County, OH
 Geauga County, OH
 Lake County, OH
 Medina County, OH
 Lorain-Elyria, OH PMSA
 Lorain County, OH

Colorado Springs, CO MSA

El Paso County, CO

Columbia, MO MSA

Boone County, MO

Columbia, SC MSA

Lexington County, SC
 Richland County, SC

Columbus, GA-AL MSA

Russell County, AL
 Chattahoochee County, GA
 Muscogee County, GA

Columbus, OH MSA

Delaware County, OH
 Fairfield County, OH
 Franklin County, OH
 Licking County, OH
 Madison County, OH
 Pickaway County, OH
 Union County, OH

Corpus Christi, TX MSA

Nueces County, TX
 San Patricio County, TX

Cumberland, MD-WV MSA

Allegany County, MD
 Mineral County, WV

Dallas, TX PMSA—see Dallas-Fort Worth, TX CMSA**Dallas-Fort Worth, TX CMSA**

Dallas, TX PMSA
 Collin County, TX
 Dallas County, TX
 Denton County, TX
 Ellis County, TX
 Kaufman County, TX
 Rockwall County, TX
 Fort Worth-Arlington, TX PMSA
 Johnson County, TX
 Parker County, TX
 Tarrant County, TX

Danbury, CT PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**Danville, VA MSA**

Pittsylvania County, VA
 Danville city, VA

Davenport-Rock Island-Moline, IA-IL MSA

Henry County, IL
 Rock Island County, IL
 Scott County, IA

Dayton-Springfield, OH MSA

Clark County, OH
 Greene County, OH
 Miami County, OH
 Montgomery County, OH

Daytona Beach, FL MSA

Volusia County, FL

Decatur, IL MSA

Macon County, IL

Denver, CO PMSA—see Denver-Boulder, CO CMSA**Denver-Boulder, CO CMSA**

Boulder-Longmont, CO PMSA
 Boulder County, CO
 Denver, CO PMSA
 Adams County, CO
 Arapahoe County, CO
 Denver County, CO
 Douglas County, CO
 Jefferson County, CO

Des Moines, IA MSA

Dallas County, IA
 Polk County, IA
 Warren County, IA

Detroit, MI PMSA—see Detroit-Ann Arbor, MI CMSA**Detroit-Ann Arbor, MI CMSA**

Ann Arbor, MI PMSA
 Washtenaw County, MI
 Detroit, MI PMSA
 Lapeer County, MI
 Livingston County, MI
 Macomb County, MI
 Monroe County, MI
 Oakland County, MI
 St. Clair County, MI
 Wayne County, MI

Dothan, AL MSA

Dale County, AL
 Houston County, AL

Dubuque, IA MSA

Dubuque County, IA

Duluth, MN-WI MSA
St. Louis County, MN
Douglas County, WI

Eau Claire, WI MSA
Chippewa County, WI
Eau Claire County, WI

El Paso, TX MSA
El Paso County, TX

Elkhart-Goshen, IN MSA
Elkhart County, IN

Elmira, NY MSA
Chemung County, NY

Enid, OK MSA
Garfield County, OK

Erie, PA MSA
Erie County, PA

Eugene-Springfield, OR MSA
Lane County, OR

Evansville, IN-KY MSA
Posey County, IN
Vanderburgh County, IN
Warrick County, IN
Henderson County, KY

Fall River, MA-RI PMSA—see Providence-Pawtucket-Fall River, RI-MA CMSA

Fargo-Moorhead, ND-MN MSA
Clay County, MN
Cass County, ND

Fayetteville, NC MSA
Cumberland County, NC

Fayetteville-Springdale, AR MSA
Washington County, AR

Fitchburg-Leominster, MA MSA
Middlesex County, MA (part)
Ashby town, MA
Worcester County, MA (part)
Ashburnham town, MA
Fitchburg city, MA
Leominster city, MA
Lunenburg town, MA
Westminster town, MA

Flint, MI MSA
Genesee County, MI

Florence, AL MSA
Colbert County, AL
Lauderdale County, AL

Florence, SC MSA
Florence County, SC

Fort Collins-Loveland, CO MSA
Larimer County, CO

Fort Lauderdale-Hollywood-Pompano Beach, FL PMSA—see Miami-Fort Lauderdale, FL CMSA

Fort Myers-Cape Coral, FI MSA
Lee County, FL

Fort Pierce, FL MSA
Martin County, FL
St. Lucie County, FL

Fort Smith, AR-OK MSA
Crawford County, AR
Sebastian County, AR
Sequoyah County, OK

Fort Walton Beach, FL MSA
Okaloosa County, FL

Fort Wayne, IN MSA
Allen County, IN
De Kalb County, IN
Whitley County, IN

Fort Worth-Arlington, TX PMSA—see Dallas-Fort Worth, TX CMSA

Fresno, CA MSA
Fresno County, CA

Gadsden, AL MSA
Etowah County, AL

Gainesville, FL MSA
Alachua County, FL
Bradford County, FL

Galveston-Texas City, TX PMSA—see Houston-Galveston-Brazoria, TX CMSA

Gary-Hammond, IN PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA

Glens Falls, NY MSA
Warren County, NY
Washington County, NY

Grand Forks, ND MSA
Grand Forks County, ND

Grand Rapids, MI MSA
Kent County, MI
Ottawa County, MI

Great Falls, MT MSA
Cascade County, MT

Greeley, CO MSA
Weld County, CO

Green Bay, WI MSA
Brown County, WI

Greensboro-Winston-Salem-High Point, NC MSA
Davidson County, NC
Davie County, NC
Forsyth County, NC
Guilford County, NC
Randolph County, NC
Stokes County, NC
Yadkin County, NC

Greenville-Spartanburg, SC MSA
Greenville County, SC
Pickens County, SC
Spartanburg County, SC

Hagerstown, MD MSA
Washington County, MD

Hamilton-Middletown, OH PMSA—see Cincinnati-Hamilton, OH-KY-IN CMSA

Harrisburg-Lebanon-Carlisle, PA MSA
Cumberland County, PA
Dauphin County, PA
Lebanon County, PA
Perry County, PA

Hartford, CT PMSA—see Hartford-New Britain-Middletown, CT CMSA

Hartford-New Britain-Middletown, CT CMSA
Bristol, CT PMSA
Hartford County, CT (part)
Bristol city, CT
Burlington town, CT
Litchfield County, CT (part)
Plymouth town, CT
Hartford, CT PMSA
Hartford County, CT (part)
Avon town, CT
Bloomfield town, CT
Canton town, CT
East Granby town, CT
East Hartford town, CT
East Windsor town, CT
Enfield town, CT
Farmington town, CT
Glastonbury town, CT
Granby town, CT
Hartford city, CT
Manchester town, CT
Marlborough town, CT

Hartford-New Britain-Middletown, CT CMSA—Con.
Hartford, CT PMSA—Con.
Hartford County, CT (part)—Con.
Newington town, CT
Rocky Hill town, CT
Simsbury town, CT
South Windsor town, CT
Suffield town, CT
West Hartford town, CT
Wethersfield town, CT
Windsor Locks town, CT
Windsor town, CT
Litchfield County, CT (part)
Barkhamsted town, CT
New Hartford town, CT
East Haddam town, CT
New London County, CT (part)
Colchester borough, CT
Colchester town balance, CT
Tolland County, CT (part)
Andover town, CT
Bolton town, CT
Columbia town, CT
Coventry town, CT
Ellington town, CT
Hebron town, CT
Somers town, CT
Stafford Springs borough, CT
Stafford town balance, CT
Tolland town, CT
Vernon town, CT
Willington town, CT
Middletown, CT PMSA
Middlesex County, CT (part)
Cromwell town, CT
Durham town, CT
East Hampton town, CT
Haddam town, CT
Middlefield town, CT
Middletown city, CT
Portland town, CT
New Britain, CT PMSA
Hartford County, CT (part)
Berlin town, CT
New Britain city, CT
Plainville town, CT
Southington town, CT

Hickory, NC MSA
Alexander County, NC
Burke County, NC
Catawba County, NC

Honolulu, HI MSA
Honolulu County, HI

Houma-Thibodaux, LA MSA
Lafourche Parish, LA
Terrebonne Parish, LA

Houston, TX PMSA—see Houston-Galveston-Brazoria, TX CMSA

Houston-Galveston-Brazoria, TX CMSA
Brazoria, TX PMSA
Brazoria County, TX
Galveston-Texas City, TX PMSA
Galveston County, TX
Houston, TX PMSA
Fort Bend County, TX
Harris County, TX
Liberty County, TX
Montgomery County, TX
Waller County, TX

Huntington-Ashland, WV-KY-OH MSA

Boyd County, KY
Carter County, KY
Greenup County, KY
Lawrence County, OH
Cabell County, WV
Wayne County, WV

Huntsville, AL MSA

Madison County, AL

Indianapolis, IN MSA

Boone County, IN
Hamilton County, IN
Hancock County, IN
Hendricks County, IN
Johnson County, IN
Marion County, IN
Morgan County, IN
Shelby County, IN

Iowa City, IA MSA

Johnson County, IA

Jackson, MI MSA

Jackson County, MI

Jackson, MS MSA

Hinds County, MS
Madison County, MS
Rankin County, MS

Jackson, TN MSA

Madison County, TN

Jacksonville, FL MSA

Clay County, FL
Duval County, FL
Nassau County, FL
St. Johns County, FL

Jacksonville, NC MSA

Onslow County, NC

Janesville-Beloit, WI MSA

Rock County, WI

Jersey City, NJ PMSA—see New York-Northern**New Jersey-Long Island, NY-NJ-CT CMSA****Johnson City-Kingsport-Bristol, TN-VA MSA**

Carter County, TN
Hawkins County, TN
Sullivan County, TN
Unicoi County, TN
Washington County, TN
Scott County, VA
Washington County, VA
Bristol city, VA

Johnstown, PA MSA

Cambria County, PA
Somerset County, PA

Joliet, IL PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA**Joplin, MO MSA**

Jasper County, MO
Newton County, MO

Kalamazoo, MI MSA

Kalamazoo County, MI

Kankakee, IL MSA

Kankakee County, IL

Kansas City, MO-KS MSA

Johnson County, KS
Leavenworth County, KS
Miami County, KS
Wyandotte County, KS
Cass County, MO
Clay County, MO
Jackson County, MO
Lafayette County, MO
Platte County, MO
Ray County, MO

Kenosha, WI PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA**Killeen-Temple, TX MSA**

Bell County, TX
Coryell County, TX

Knoxville, TN MSA

Anderson County, TN
Blount County, TN
Grainger County, TN
Jefferson County, TN
Knox County, TN
Sevier County, TN
Union County, TN

Kokomo, IN MSA

Howard County, IN
Tipton County, IN

La Crosse, WI MSA

La Crosse County, WI

Lafayette, LA MSA

Lafayette Parish, LA
St. Martin Parish, LA

Lafayette-West Lafayette, IN MSA

Tippecanoe County, IN

Lake Charles, LA MSA

Calcasieu Parish, LA

Lake County, IL PMSA—see Chicago-Gary-**Lake County, IL-IN-WI CMSA****Lakeland-Winter Haven, FL MSA**

Polk County, FL

Lancaster, PA MSA

Lancaster County, PA

Lansing-East Lansing, MI MSA

Clinton County, MI
Eaton County, MI
Ingham County, MI

Laredo, TX MSA

Webb County, TX

Las Cruces, NM MSA

Dona Ana County, NM

Las Vegas, NV MSA

Clark County, NV

Lawrence, KS MSA

Douglas County, KS

Lawrence-Haverhill, MA-NH PMSA—see Boston-Lawrence-Salem, MA-NH CMSA**Lawton, OK MSA**

Comanche County, OK

Lewiston-Auburn, ME MSA

Androscoggin County, ME (part)
Auburn city, ME
Greene town, ME
Lewiston city, ME
Lisbon town, ME
Mechanic Falls town, ME
Poland town, ME
Sabattus town, ME

Lexington-Fayette, KY MSA

Bourbon County, KY
Clark County, KY
Fayette County, KY
Jessamine County, KY
Scott County, KY
Woodford County, KY

Lima, OH MSA

Allen County, OH
Auglaize County, OH

Lincoln, NE MSA

Lancaster County, NE

Little Rock-North Little Rock, AR MSA

Faulkner County, AR
Lonoke County, AR
Pulaski County, AR
Saline County, AR

Longview-Marshall, TX MSA

Gregg County, TX
Harrison County, TX

Lorain-Elyria, OH PMSA—see Cleveland-Akron-Lorain, OH CMSA**Los Angeles-Anaheim-Riverside, CA CMSA**

Anaheim-Santa Ana, CA PMSA
Orange County, CA
Los Angeles-Long Beach, CA PMSA
Los Angeles County, CA
Oxnard-Ventura, CA PMSA
Ventura County, CA
Riverside-San Bernardino, CA PMSA
Riverside County, CA
San Bernardino County, CA

Los Angeles-Long Beach, CA PMSA—see Los Angeles-Anaheim-Riverside, CA CMSA**Louisville, KY-IN MSA**

Clark County, IN
Floyd County, IN
Harrison County, IN
Bullitt County, KY
Jefferson County, KY
Oldham County, KY
Shelby County, KY

Lowell, MA-NH PMSA—see Boston-Lawrence-Salem, MA-NH CMSA**Lubbock, TX MSA**

Lubbock County, TX

Lynchburg, VA MSA

Amherst County, VA
Campbell County, VA
Lynchburg city, VA

Macon-Warner Robins, GA MSA

Bibb County, GA
Houston County, GA
Jones County, GA
Peach County, GA

Madison, WI MSA

Dane County, WI

Manchester, NH MSA

Hillsborough County, NH (part)
Bedford town, NH
Goffstown town, NH
Manchester city, NH
Merrimack County, NH (part)
Allenstown town, NH
Hooksett town, NH
Auburn town, NH
Candia town, NH

Mansfield, OH MSA

Richland County, OH

McAllen-Edinburg-Mission, TX MSA

Hidalgo County, TX

Medford, OR MSA

Jackson County, OR

Melbourne-Titusville-Palm Bay, FL MSA

Brevard County, FL

Memphis, TN-AR-MS MSA

Crittenden County, AR
De Soto County, MS
Shelby County, TN
Tipton County, TN

Merced, CA MSA

Merced County, CA

Miami-Fort Lauderdale, FL CMSA

Fort Lauderdale-Hollywood-Pompano Beach, FL PMSA
Broward County, FL
Miami-Hialeah, FL PMSA
Dade County, FL

Miami-Hialeah, FL PMSA—see **Miami-Fort Lauderdale, FL CMSA**

Middlesex-Somerset-Hunterdon, NJ PMSA
—see **New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**

Middletown, CT PMSA—see **Hartford-New Britain-Middletown, CT CMSA**

Midland, TX MSA
Midland County, TX

Milwaukee, WI PMSA—see **Milwaukee-Racine, WI CMSA**

Milwaukee-Racine, WI CMSA
Milwaukee, WI PMSA
Milwaukee County, WI
Ozaukee County, WI
Washington County, WI
Waukesha County, WI
Racine, WI PMSA
Racine County, WI

Minneapolis-St. Paul, MN-WI MSA
Anoka County, MN
Carver County, MN
Chisago County, MN
Dakota County, MN
Hennepin County, MN
Isanti County, MN
Ramsey County, MN
Scott County, MN
Washington County, MN
Wright County, MN
St. Croix County, WI

Mobile, AL MSA
Baldwin County, AL
Mobile County, AL

Modesto, CA MSA
Stanislaus County, CA

Monmouth-Ocean, NJ PMSA—see **New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**

Monroe, LA MSA
Ouachita Parish, LA

Montgomery, AL MSA
Autauga County, AL
Elmore County, AL
Montgomery County, AL

Muncie, IN MSA
Delaware County, IN

Muskegon, MI MSA
Muskegon County, MI

Naples, FL MSA
Collier County, FL

Nashua, NH PMSA—see **Boston-Lawrence-Salem, MA-NH CMSA**

Nashville, TN MSA
Cheatham County, TN
Davidson County, TN
Dickson County, TN
Robertson County, TN
Rutherford County, TN
Sumner County, TN
Williamson County, TN
Wilson County, TN

Nassau-Suffolk, NY PMSA—see **New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**

New Bedford, MA MSA
Bristol County, MA (part)
Acushnet town, MA
Dartmouth town, MA
Fairhaven town, MA
Freetown town, MA
New Bedford city, MA

New Bedford, MA MSA—Con.
Plymouth County, MA (part)
Marion town, MA
Mattapoisett town, MA
Rochester town, MA

New Britain, CT PMSA—see **Hartford-New Britain-Middletown, CT CMSA**

New Haven-Meriden, CT MSA
Middlesex County, CT (part)
Clinton town, CT
Killingworth town, CT
New Haven County, CT (part)
Bethany town, CT
Branford town, CT
Cheshire town, CT
East Haven town, CT
Guilford town, CT
Hamden town, CT
Madison town, CT
Meriden city, CT
New Haven city, CT
North Branford town, CT
North Haven town, CT
Orange town, CT
Wallingford town, CT
West Haven city, CT
Woodbridge town, CT

New London-Norwich, CT-RI MSA
New London County, CT (part)
Bozrah town, CT
East Lyme town, CT
Franklin town, CT
Griswold town balance, CT
Groton city, CT
Groton town balance, CT
Jewett City borough, CT
Ledyard town, CT
Lisbon town, CT
Montville town, CT
New London city, CT
North Stonington town, CT
Norwich city, CT
Old Lyme town, CT
Preston town, CT
Salem town, CT
Sprague town, CT
Stonington town, CT
Waterford town, CT
Windham County, CT (part)
Canterbury town, CT
Washington County, RI (part)
Hopkinton town, RI
Westerly town, RI

New Orleans, LA MSA
Jefferson Parish, LA
Orleans Parish, LA
St. Bernard Parish, LA
St. Charles Parish, LA
St. John the Baptist Parish, LA
St. Tammany Parish, LA

New York, NY PMSA—see **New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**

New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA
Bergen-Passaic, NJ PMSA
Bergen County, NJ
Passaic County, NJ
Bridgeport-Milford, CT PMSA
Fairfield County, CT (part)
Bridgeport city, CT
Easton town, CT
Fairfield town, CT
Monroe town, CT

New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA—Con.
Bridgeport-Milford, CT PMSA—Con.
Fairfield County, CT (part)—Con.
Shelton city, CT
Stratford town, CT
Trumbull town, CT
New Haven County, CT (part)
Ansonia city, CT
Beacon Falls town, CT
Derby city, CT
Milford city, CT
Milford town balance, CT
Oxford town, CT
Seymour town, CT
Woodmont borough, CT
Danbury, CT PMSA
Fairfield County, CT (part)
Bethel town, CT
Brookfield town, CT
Danbury city, CT
New Fairfield town, CT
Newtown town, CT
Redding town, CT
Ridgefield town, CT
Sherman town, CT
Litchfield County, CT (part)
Bridgewater town, CT
New Milford town, CT
Jersey City, NJ PMSA
Hudson County, NJ
Middlesex-Somerset-Hunterdon, NJ PMSA
Hunterdon County, NJ
Middlesex County, NJ
Somerset County, NJ
Monmouth-Ocean, NJ PMSA
Monmouth County, NJ
Ocean County, NJ
Nassau-Suffolk, NY PMSA
Nassau County, NY
Suffolk County, NY
New York, NY PMSA
Bronx County, NY
Kings County, NY
New York County, NY
Putnam County, NY
Queens County, NY
Richmond County, NY
Rockland County, NY
Westchester County, NY
Newark, NJ PMSA
Essex County, NJ
Morris County, NJ
Sussex County, NJ
Union County, NJ
Norwalk, CT PMSA
Fairfield County, CT (part)
Norwalk city, CT
Weston town, CT
Westport town, CT
Wilton town, CT
Orange County, NY PMSA
Orange County, NY
Stamford, CT PMSA
Fairfield County, CT (part)
Darien town, CT
Greenwich town, CT
New Canaan town, CT
Stamford city, CT

Newark, NJ PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA
Niagara Falls, NY PMSA—see Buffalo-Niagara Falls, NY CMSA
Norfolk-Virginia Beach-Newport News, VA MSA
 Gloucester County, VA
 James City County, VA
 York County, VA
 Chesapeake city, VA
 Hampton city, VA
 Newport News city, VA
 Norfolk city, VA
 Poquoson city, VA
 Portsmouth city, VA
 Suffolk city, VA
 Virginia Beach city, VA
 Williamsburg city, VA
Norwalk, CT PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA
Oakland, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA
Ocala, FL MSA
 Marion County, FL
Odessa, TX MSA
 Ector County, TX
Oklahoma City, OK MSA
 Canadian County, OK
 Cleveland County, OK
 Logan County, OK
 McClain County, OK
 Oklahoma County, OK
 Pottawatomie County, OK
Olympia, WA MSA
 Thurston County, WA
Omaha, NE-IA MSA
 Pottawattamie County, IA
 Douglas County, NE
 Sarpy County, NE
 Washington County, NE
Orange County, NY PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA
Orlando, FL MSA
 Orange County, FL
 Osceola County, FL
 Seminole County, FL
Owensboro, KY MSA
 Daviess County, KY
Oxnard-Ventura, CA PMSA—see Los Angeles-Anaheim-Riverside, CA CMSA
Panama City, FL MSA
 Bay County, FL
Parkersburg-Marietta, WV-OH MSA
 Washington County, OH
 Wood County, WV
Pascagoula, MS MSA
 Jackson County, MS
Pawtucket-Woonsocket-Attleboro, RI-MA PMSA—see Providence-Pawtucket-Fall River, RI-MA CMSA
Pensacola, FL MSA
 Escambia County, FL
 Santa Rosa County, FL
Peoria, IL MSA
 Peoria County, IL
 Tazewell County, IL
 Woodford County, IL
Philadelphia, PA-NJ PMSA—see Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA

Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA
 Philadelphia, PA-NJ PMSA
 Burlington County, NJ
 Camden County, NJ
 Gloucester County, NJ
 Bucks County, PA
 Chester County, PA
 Delaware County, PA
 Montgomery County, PA
 Philadelphia County, PA
 Trenton, NJ PMSA
 Mercer County, NJ
 Vineland-Millville-Bridgeton, NJ PMSA
 Cumberland County, NJ
 Wilmington, DE-NJ-MD PMSA
 New Castle County, DE
 Cecil County, MD
 Salem County, NJ
Phoenix, AZ MSA
 Maricopa County, AZ
Pine Bluff, AR MSA
 Jefferson County, AR
Pittsburgh, PA PMSA—see Pittsburgh-Beaver Valley, PA CMSA
Pittsburgh-Beaver Valley, PA CMSA
 Beaver County, PA PMSA
 Beaver County, PA
 Pittsburgh, PA PMSA
 Allegheny County, PA
 Fayette County, PA
 Washington County, PA
 Westmoreland County, PA
Pittsfield, MA MSA
 Berkshire County, MA (part)
 Cheshire town, MA
 Dalton town, MA
 Hinsdale town, MA
 Lanesborough town, MA
 Lee town, MA
 Lenox town, MA
 Pittsfield city, MA
 Richmond town, MA
 Stockbridge town, MA
Portland, ME MSA
 Cumberland County, ME (part)
 Cape Elizabeth town, ME
 Cumberland town, ME
 Falmouth town, ME
 Freeport town, ME
 Gorham town, ME
 Gray town, ME
 North Yarmouth town, ME
 Portland city, ME
 Raymond town, ME
 Scarborough town, ME
 South Portland city, ME
 Standish town, ME
 Westbrook city, ME
 Windham town, ME
 Yarmouth town, ME
 York County, ME (part)
 Buxton town, ME
 Hollis town, ME
 Old Orchard Beach town, ME
Portland, OR PMSA—see Portland-Vancouver, OR-WA CMSA

Portland-Vancouver, OR-WA CMSA
 Portland, OR PMSA
 Clackamas County, OR
 Multnomah County, OR
 Washington County, OR
 Yamhill County, OR
 Vancouver, WA PMSA
 Clark County, WA
Portsmouth-Dover-Rochester, NH-ME MSA
 York County, ME (part)
 Berwick town, ME
 Eliot town, ME
 Kittery town, ME
 North Berwick town, ME
 Ogunquit town, ME
 South Berwick town, ME
 Wells town, ME
 York town, ME
 Rockingham County, NH (part)
 Exeter town, NH
 Greenland town, NH
 Hampton town, NH
 New Castle town, NH
 Newfields town, NH
 Newington town, NH
 Newmarket town, NH
 North Hampton town, NH
 Portsmouth city, NH
 Rye town, NH
 Stratham town, NH
 Strafford County, NH (part)
 Barrington town, NH
 Dover city, NH
 Durham town, NH
 Farmington town, NH
 Lee town, NH
 Madbury town, NH
 Milton town, NH
 Rochester city, NH
 Rollinsford town, NH
 Somersworth city, NH
Poughkeepsie, NY MSA
 Dutchess County, NY
Providence, RI PMSA—see Providence-Pawtucket-Fall River, RI-MA CMSA
Providence-Pawtucket-Fall River, RI-MA CMSA
 Fall River, MA-RI PMSA
 Bristol County, MA (part)
 Fall River city, MA
 Somerset town, MA
 Swansea town, MA
 Westport town, MA
 Newport County, RI (part)
 Little Compton town, RI
 Tiverton town, RI
 Pawtucket-Woonsocket-Attleboro, RI-MA PMSA
 Bristol County, MA (part)
 Attleboro city, MA
 North Attleborough town, MA
 Rehoboth town, MA
 Seekonk town, MA
 Norfolk County, MA (part)
 Plainville town, MA
 Worcester County, MA (part)
 Blackstone town, MA
 Millville town, MA
 Providence County, RI (part)
 Burrillville town, RI
 Central Falls city, RI
 Cumberland town, RI
 Lincoln town, RI

Providence-Pawtucket-Fall River, RI-MA CMSA—Con.

Pawtucket-Woonsocket-Attleboro, RI-MA PMSA—Con.

Providence County, RI (part)—Con.

North Smithfield town, RI

Pawtucket city, RI

Smithfield town, RI

Woonsocket city, RI

Providence, RI PMSA

Bristol County, RI (part)

Barrington town, RI

Bristol town, RI

Warren town, RI

Kent County, RI (part)

Coventry town, RI

East Greenwich town, RI

Warwick city, RI

West Warwick town, RI

Newport County, RI (part)

Jamestown town, RI

Providence County, RI (part)

Cranston city, RI

East Providence city, RI

Foster town, RI

Glocester town, RI

Johnston town, RI

North Providence town, RI

Providence city, RI

Scituate town, RI

Washington County, RI (part)

Exeter town, RI

Narragansett town, RI

North Kingstown town, RI

Richmond town, RI

South Kingstown town, RI

Provo-Orem, UT MSA

Utah County, UT

Pueblo, CO MSA

Pueblo County, CO

Racine, WI PMSA—see Milwaukee-Racine, WI CMSA

Raleigh-Durham, NC MSA

Durham County, NC

Franklin County, NC

Orange County, NC

Wake County, NC

Rapid City, SD MSA

Pennington County, SD

Reading, PA MSA

Berks County, PA

Redding, CA MSA

Shasta County, CA

Reno, NV MSA

Washoe County, NV

Richland-Kennewick-Pasco, WA MSA

Benton County, WA

Franklin County, WA

Richmond-Petersburg, VA MSA

Charles City County, VA

Chesterfield County, VA

Dinwiddie County, VA

Goochland County, VA

Hanover County, VA

Henrico County, VA

New Kent County, VA

Powhatan County, VA

Prince George County, VA

Colonial Heights city, VA

Hopewell city, VA

Petersburg city, VA

Richmond city, VA

Riverside-San Bernardino, CA PMSA—see Los Angeles-Anaheim-Riverside, CA CMSA

Roanoke, VA MSA

Botetourt County, VA

Roanoke County, VA

Roanoke city, VA

Salem city, VA

Rochester, MN MSA

Olmsted County, MN

Rochester, NY MSA

Livingston County, NY

Monroe County, NY

Ontario County, NY

Orleans County, NY

Wayne County, NY

Rockford, IL MSA

Boone County, IL

Winnebago County, IL

Sacramento, CA MSA

El Dorado County, CA

Placer County, CA

Sacramento County, CA

Yolo County, CA

Saginaw-Bay City-Midland, MI MSA

Bay County, MI

Midland County, MI

Saginaw County, MI

St. Cloud, MN MSA

Benton County, MN

Sherburne County, MN

Stearns County, MN

St. Joseph, MO MSA

Buchanan County, MO

St. Louis, MO-IL MSA

Clinton County, IL

Jersey County, IL

Madison County, IL

Monroe County, IL

St. Clair County, IL

Franklin County, MO

Jefferson County, MO

St. Charles County, MO

St. Louis County, MO

St. Louis city, MO

Salem, OR MSA

Marion County, OR

Polk County, OR

Salem-Gloucester, MA PMSA—see Boston-Lawrence-Salem, MA-NH CMSA

Salinas-Seaside-Monterey, CA MSA

Monterey County, CA

Salt Lake City-Ogden, UT MSA

Davis County, UT

Salt Lake County, UT

Weber County, UT

San Angelo, TX MSA

Tom Green County, TX

San Antonio, TX MSA

Bexar County, TX

Comal County, TX

Guadalupe County, TX

San Diego, CA MSA

San Diego County, CA

San Francisco, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA

San Francisco-Oakland-San Jose, CA CMSA

Oakland, CA PMSA

Alameda County, CA

Contra Costa County, CA

San Francisco-Oakland-San Jose, CA CMSA—Con.

San Francisco, CA PMSA

Marin County, CA

San Francisco County, CA

San Mateo County, CA

San Jose, CA PMSA

Santa Clara County, CA

Santa Cruz, CA PMSA

Santa Cruz County, CA

Santa Rosa-Petaluma, CA PMSA

Sonoma County, CA

Vallejo-Fairfield-Napa, CA PMSA

Napa County, CA

Solano County, CA

San Jose, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA

Santa Barbara-Santa Maria-Lompoc, CA MSA

Santa Barbara County, CA

Santa Cruz, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA

Santa Fe, NM MSA

Los Alamos County, NM

Santa Fe County, NM

Santa Rosa-Petaluma, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA

Sarasota, FL MSA

Sarasota County, FL

Savannah, GA MSA

Chatham County, GA

Effingham County, GA

Scranton-Wilkes-Barre, PA MSA

Columbia County, PA

Lackawanna County, PA

Luzerne County, PA

Monroe County, PA

Wyoming County, PA

Seattle, WA PMSA—see Seattle-Tacoma, WA CMSA

Seattle-Tacoma, WA CMSA

Seattle, WA PMSA

King County, WA

Snohomish County, WA

Tacoma, WA PMSA

Pierce County, WA

Sharon, PA MSA

Mercer County, PA

Sheboygan, WI MSA

Sheboygan County, WI

Sherman-Denison, TX MSA

Grayson County, TX

Shreveport, LA MSA

Bossier Parish, LA

Caddo Parish, LA

Sioux City, IA-NE MSA

Woodbury County, IA

Dakota County, NE

Sioux Falls, SD MSA

Minnehaha County, SD

South Bend-Mishawaka, IN MSA

St. Joseph County, IN

Spokane, WA MSA

Spokane County, WA

Springfield, IL MSA

Menard County, IL

Sangamon County, IL

Springfield, MO MSA

Christian County, MO

Greene County, MO

Springfield, MA MSA

Hampden County, MA (part)
 Agawam town, MA
 Chicopee city, MA
 East Longmeadow town, MA
 Hampden town, MA
 Holyoke city, MA
 Longmeadow town, MA
 Ludlow town, MA
 Monson town, MA
 Montgomery town, MA
 Palmer town, MA
 Russell town, MA
 Southwick town, MA
 Springfield city, MA
 Westfield city, MA
 West Springfield town, MA
 Wilbraham town, MA

Stamford, CT PMSA—see New York-Northern**New Jersey-Long Island, NY-NJ-CT CMSA****State College, PA MSA**

Centre County, PA

Steubenville-Weirton, OH-WV MSA

Jefferson County, OH
 Brooke County, WV
 Hancock County, WV

Stockton, CA MSA

San Joaquin County, CA

Syracuse, NY MSA

Madison County, NY
 Onondaga County, NY
 Oswego County, NY

Tacoma, WA PMSA—see Seattle-Tacoma, WA CMSA**Tallahassee, FL MSA**

Gadsden County, FL
 Leon County, FL

Tampa-St. Petersburg-Clearwater, FL MSA

Hernando County, FL
 Hillsborough County, FL
 Pasco County, FL
 Pinellas County, FL

Terre Haute, IN MSA

Clay County, IN
 Vigo County, IN

Texarkana, TX-Texarkana, AR MSA

Miller County, AR
 Bowie County, TX

Toledo, OH MSA

Fulton County, OH
 Lucas County, OH
 Wood County, OH

Topeka, KS MSA

Shawnee County, KS

Trenton, NJ PMSA—see Philadelphia-Wilmington-**Trenton, PA-NJ-DE-MD CMSA****Tucson, AZ MSA**

Pima County, AZ

Tulsa, OK MSA

Creek County, OK
 Osage County, OK
 Rogers County, OK
 Tulsa County, OK
 Wagoner County, OK

Tuscaloosa, AL MSA

Tuscaloosa County, AL

Tyler, TX MSA

Smith County, TX

Utica-Rome, NY MSA

Herkimer County, NY
 Oneida County, NY

Vallejo-Fairfield-Napa, CA PMSA—see San**Francisco-Oakland-San Jose, CA CMSA****Vancouver, WA PMSA—see Portland-****Vancouver, OR-WA CMSA****Victoria, TX MSA**

Victoria County, TX

Vineland-Millville-Bridgeton, NJ PMSA—see**Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA****Visalia-Tulare-Porterville, CA MSA**

Tulare County, CA

Waco, TX MSA

McLennan County, TX

Washington, DC-MD-VA MSA

District of Columbia, DC
 Calvert County, MD
 Charles County, MD
 Frederick County, MD
 Montgomery County, MD
 Prince George's County, MD
 Arlington County, VA
 Fairfax County, VA
 Loudoun County, VA
 Prince William County, VA
 Stafford County, VA
 Alexandria city, VA
 Fairfax city, VA
 Falls Church city, VA
 Manassas city, VA
 Manassas Park city, VA

Waterbury, CT MSA

Litchfield County, CT (part)
 Bethlehem town, CT
 Thomaston town, CT
 Watertown town, CT
 Woodbury town, CT
 New Haven County, CT (part)
 Middlebury town, CT
 Naugatuck borough, CT
 Prospect town, CT
 Southbury town, CT
 Waterbury city, CT
 Wolcott town, CT

Waterloo-Cedar Falls, IA MSA

Black Hawk County, IA
 Bremer County, IA

Wausau, WI MSA

Marathon County, WI

West Palm Beach-Boca Raton-Delray Beach, FL MSA

Palm Beach County, FL

Wheeling, WV-OH MSA

Belmont County, OH
 Marshall County, WV
 Ohio County, WV

Wichita, KS MSA

Butler County, KS
 Harvey County, KS
 Sedgwick County, KS

Wichita Falls, TX MSA

Wichita County, TX

Williamsport, PA MSA

Lycoming County, PA

Wilmington, DE-NJ-MD PMSA—see Philadelphia-**Wilmington-Trenton, PA-NJ-DE-MD CMSA****Wilmington, NC MSA**

New Hanover County, NC

Worcester, MA MSA

Worcester County, MA (part)

Auburn town, MA
 Barre town, MA
 Boylston town, MA
 Brookfield town, MA
 Charlton town, MA
 Clinton town, MA
 Douglas town, MA
 Dudley town, MA
 East Brookfield town, MA
 Grafton town, MA
 Holden town, MA
 Leicester town, MA
 Millbury town, MA
 Northborough town, MA
 Northbridge town, MA
 North Brookfield town, MA
 Oxford town, MA
 Paxton town, MA
 Princeton town, MA
 Rutland town, MA
 Shrewsbury town, MA
 Spencer town, MA
 Sterling town, MA
 Sutton town, MA
 Uxbridge town, MA
 Webster town, MA
 Westborough town, MA
 West Boylston town, MA
 Worcester city, MA

Yakima, WA MSA

Yakima County, WA

York, PA MSA

Adams County, PA
 York County, PA

Youngstown-Warren, OH MSA

Mahoning County, OH
 Trumbull County, OH

Yuba City, CA MSA

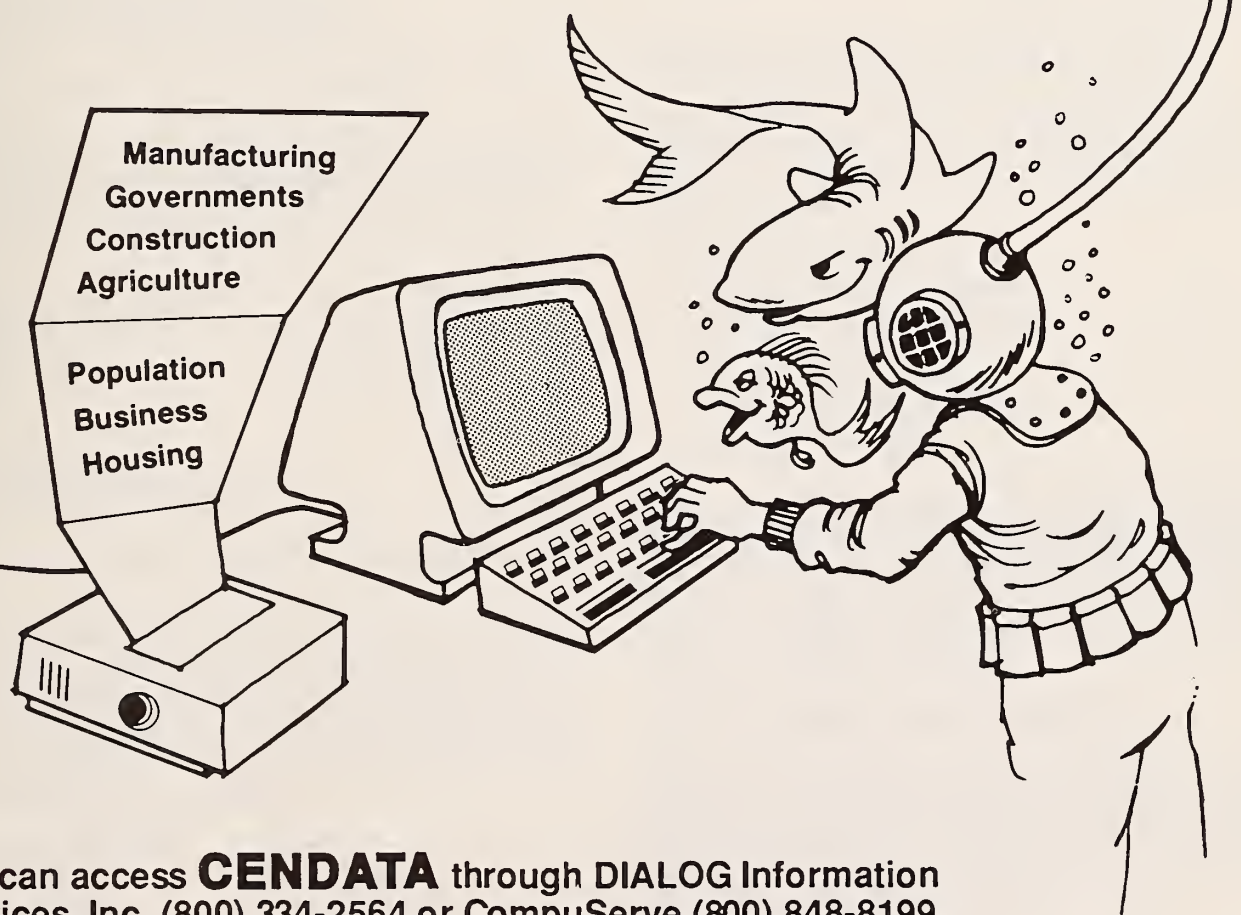
Sutter County, CA
 Yuba County, CA

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PUBLICATION PROGRAM

1987 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)
- Land developers and subdividers

Data products in the Census of Construction Industries are issued in 4 publication series and in 3 other media:

- Printed reports [P]
- CD-ROM [C]
- Computer tape [T]
- Highlights online [+]

Preliminary Industry Series (CC87-I-1(P) through CC87-I-28(P))

(Available November 1988 through May 1989) [P]

Twenty-seven separate industry reports and a United States summary report, providing national statistics for establishments with payroll. Statistics shown for 1987 include:

- Number of establishments
- Number of employees
- Payroll
- Hours worked
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC87-I-1 through CC87-I-28)

(Available June 1989 through November 1989) [P] [C] [T] [+]

Twenty-seven separate industry reports and a United States summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC87-A-1 through CC87-A-10)

(Available January 1990 through March 1990) [P] [C] [T] [+]

Nine reports on the construction industries, representing each census geographic division, and a United States summary report. Regional reports provide detailed data for States and metropolitan statistical areas.

Subject Report—Legal Form of Organization and Type of Operation (CC87-S-1)

(Available May 1990) [P]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUSES REPORTS

The Census of Construction Industries is part of the 1987 Economic Censuses. These are conducted at five-year intervals in years ending in 2 and 7 and consist of seven separate censuses:

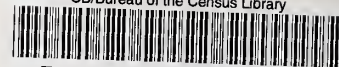
- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the Census of Outlying Areas, including separate economic censuses of Puerto Rico and other outlying areas. The Census of Agriculture and Census of Governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, DC 20233. If you have any questions, call Census Customer Services 1-(301)-763-4100.

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